Unit Move Scenario

Planning Conference III

7-8 May 98

http://www.eucom.mil/hq/ecj4/dodait.htm

LTC BRIAN LAYER
U.S. EUROPEAN COMMAND
LOGISTICS AND SECURITY
ASSISTANCE DIRECTORATE

THE AGENDA

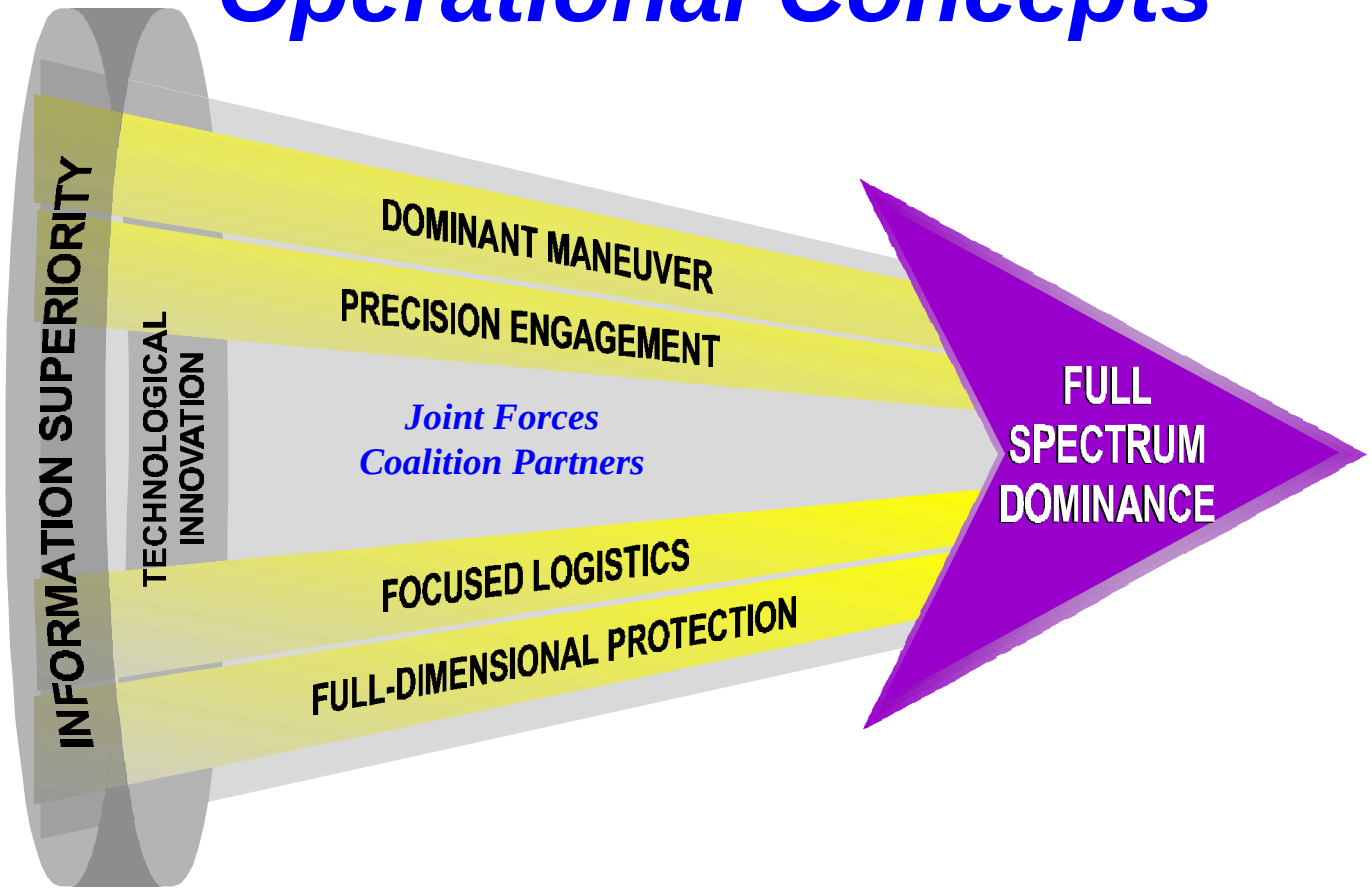
7 May. 0900-1600

Discussion	Office/POC
Prototype Overview	LTC Layer
Equipment Update	LTC Layer
SMART Technology	Sue Durham
PAX Movement Update	LTC Layer
Move Synchronization	LTC Layer

8 May. 0900-1600

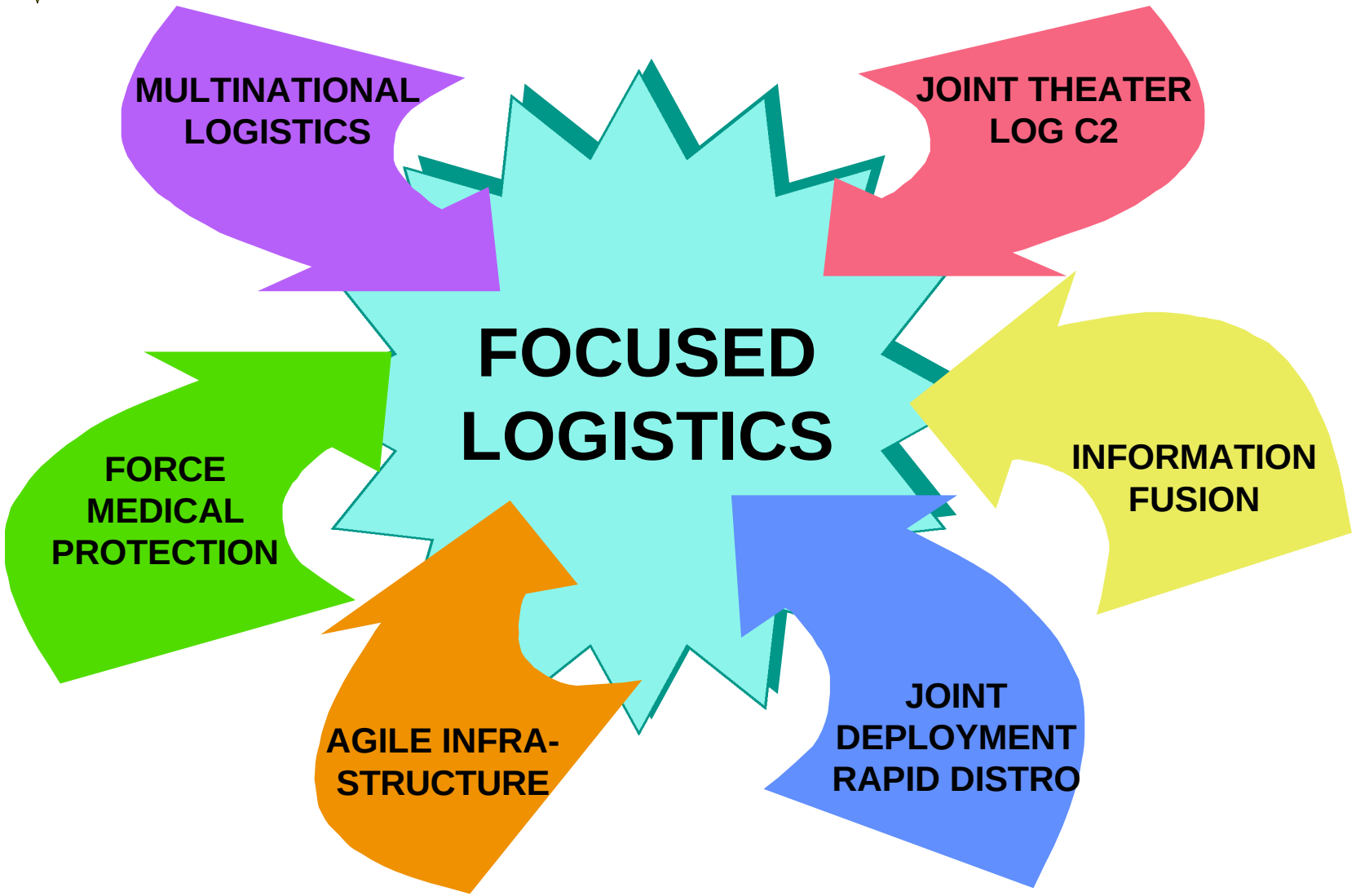
Discussion	Office/POC
CMOS	CMOS/TBD
Evaluation Plan	LTC Layer
Movement Schdule	LTC Layer

Joint Vision 2010 Operational Concepts

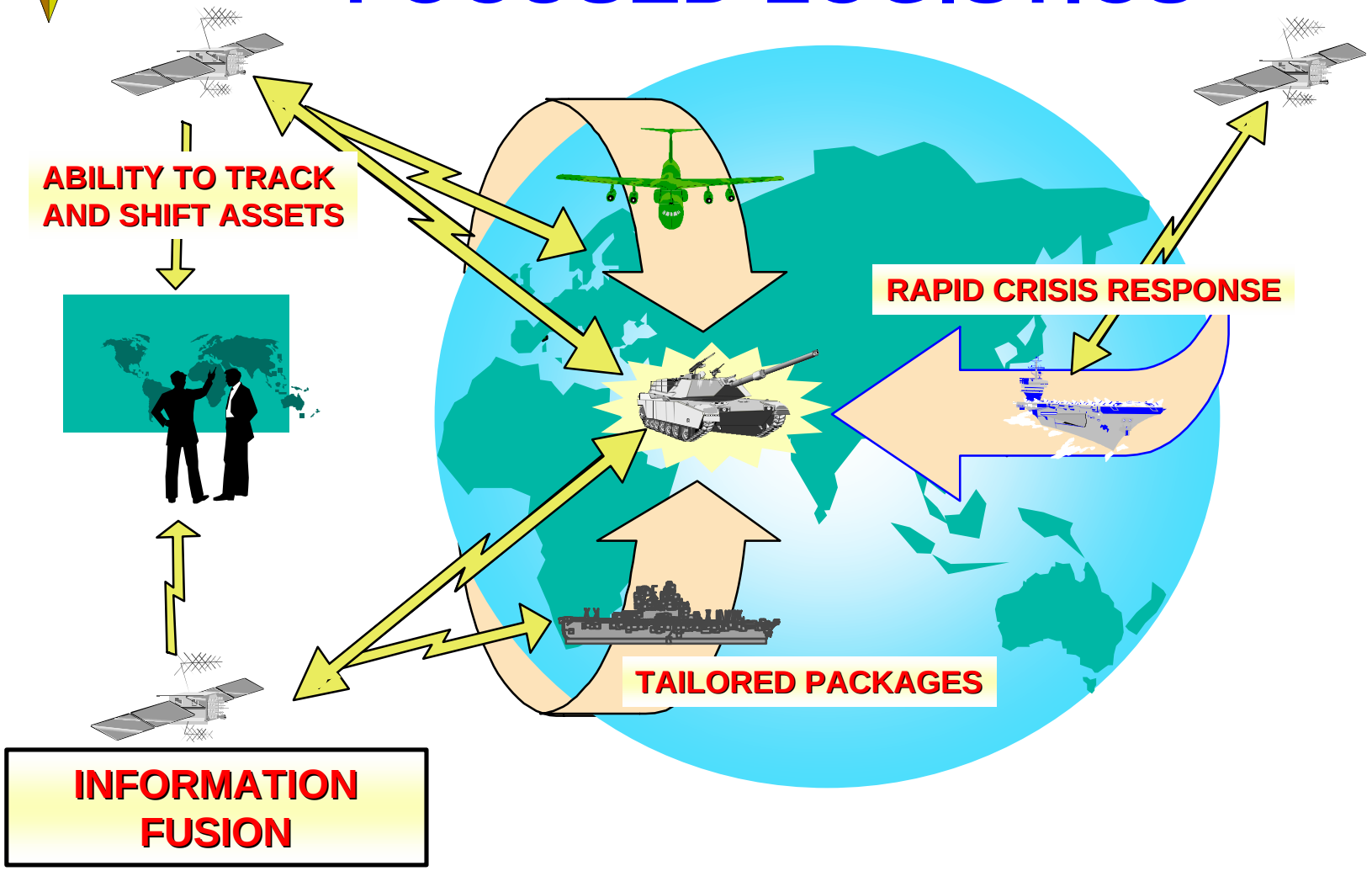


Advanced Technologies → **New Operational Concepts and Doctrine** → **Organizational Change**

JOINT VISION 2010
CINC/JTF REQUIREMENTS



JOINT VISION 2010
"FOCUSED LOGISTICS"



DEVELOPING THE INFRASTRUCTURE

AIT IS HERE TO STAY

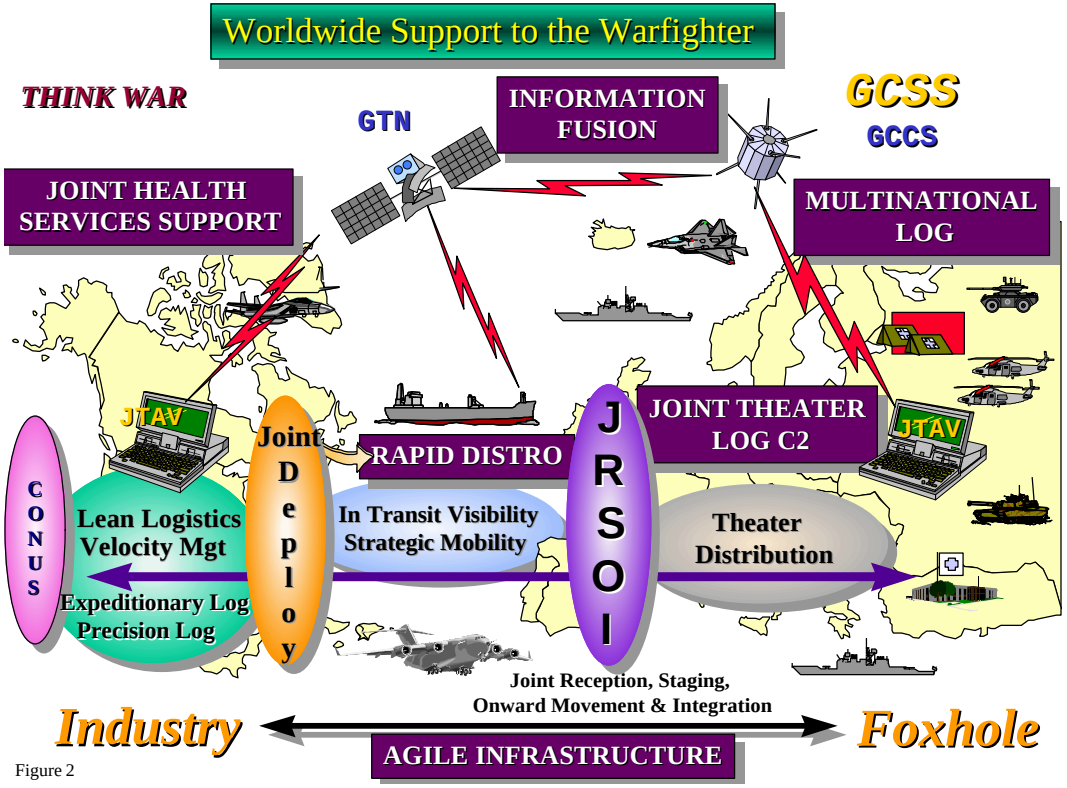
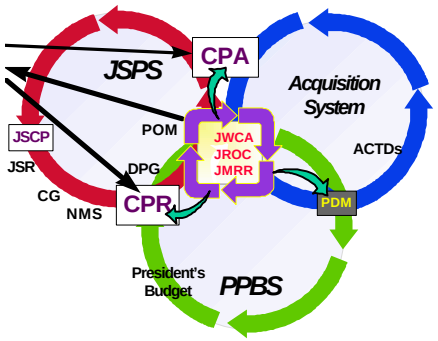


Figure 2

TEACH AIT IN THE SCHOOLHOUSES

AIT



INCLUDE AIT IN DPG AND POM PROCESSES

INCORPORATE AIT INTO DOCTRINE, TACTICS TECHNIQUES AND PROCEDURES

BEYOND THE THEATER

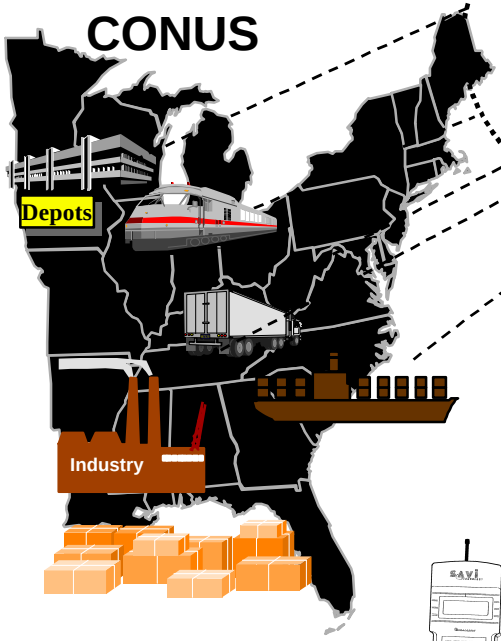
MUST HAVE DoD AIT FOCAL POINT

WORLDWIDE AIT COMPATIBILITY

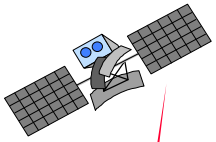
STANDARD AIT BUSINESS PROCESSES

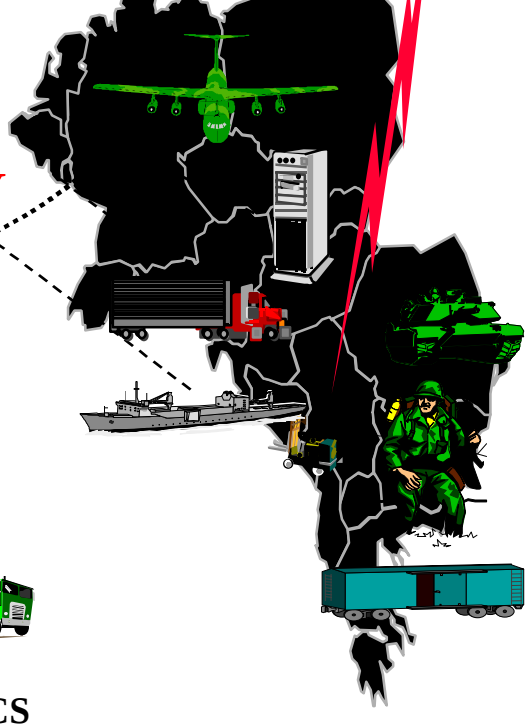
WORLDWIDE FREQUENCY APPROVALS

CONUS



THEATER





Linear/2D Bar Codes

Optical Memory Card

Radio Frequency ID

MARC/SMART Cards

DTRACS Satellite Tracking

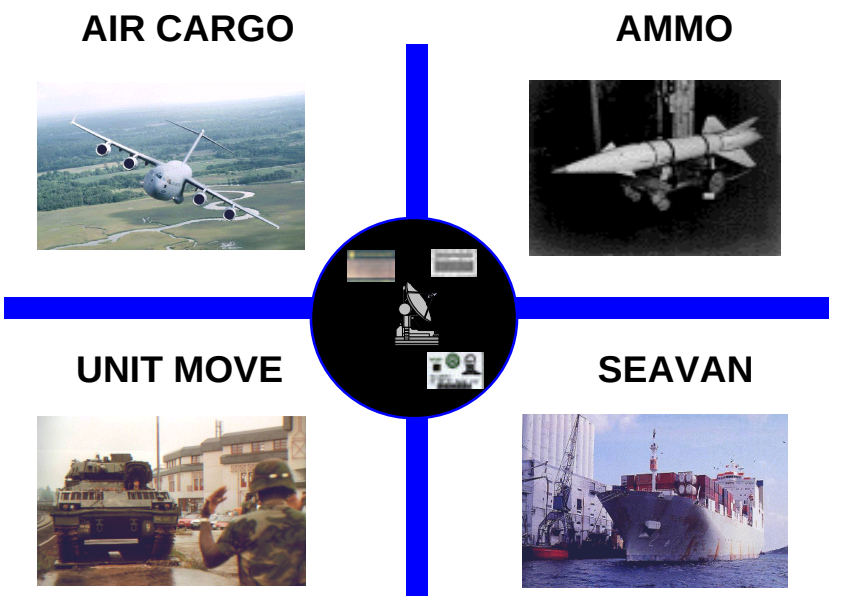
DOD AIT OPERATIONAL PROTOTYPE

DLA IS EXECUTIVE AGENT

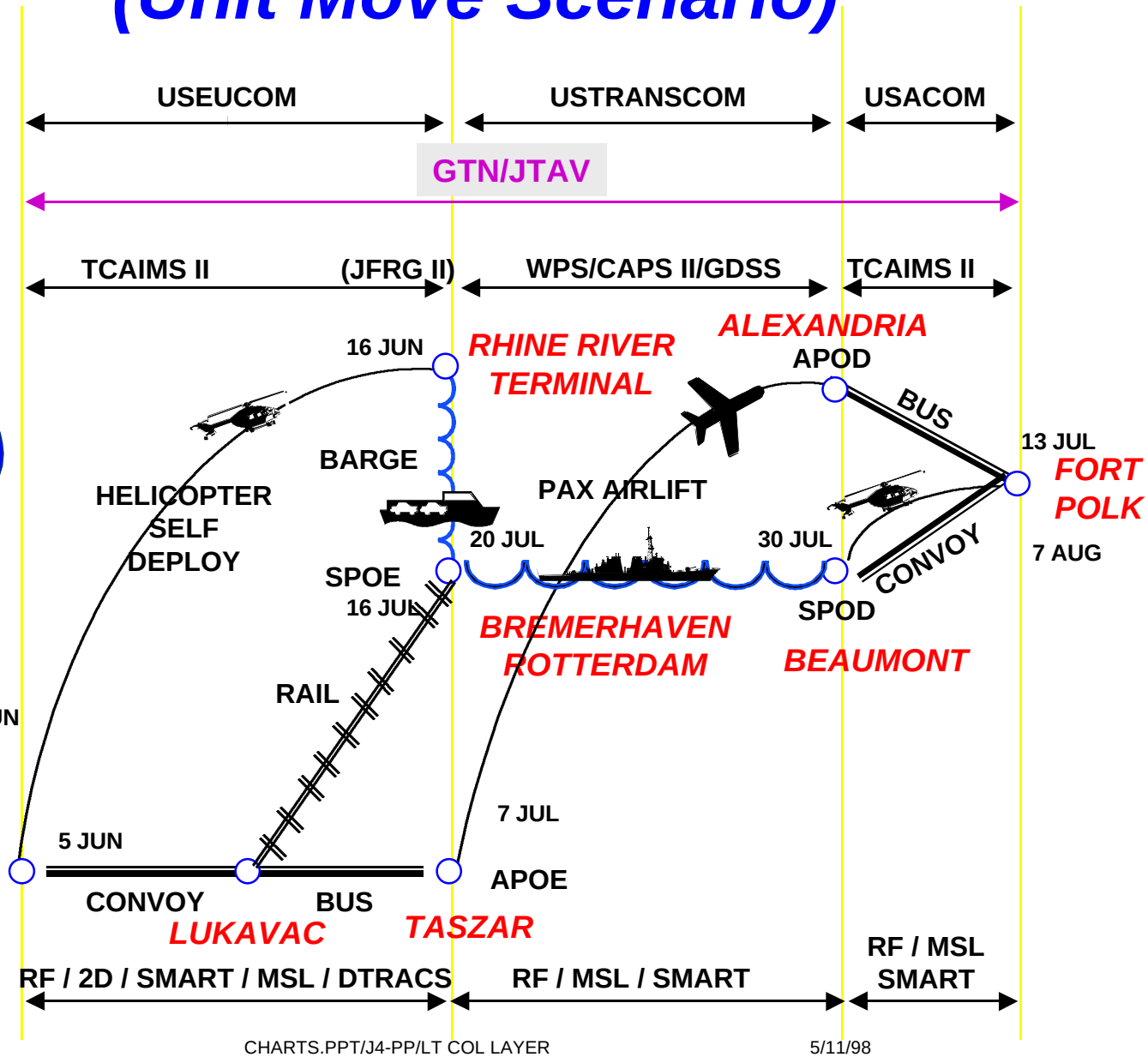
OBJECTIVES

Universal Applicability
Most Effective/Efficient AIT
Flyaway Kit Composition and Distribution
AIT/AIS Integration
Data Broadcast Timeliness
Flexibility in the Operational Environment
Identify/Validate CONOPS Funding
Identify Security Issues
Force Structure Issues and Training Impacts
Validation of Data Requirements
Data Applicability for JDST

SCENARIOS

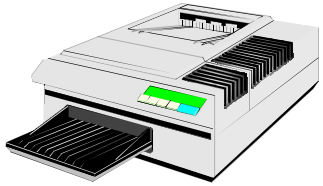


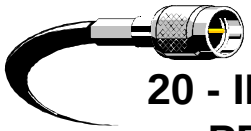
DOD AIT OPERATIONAL PROTOTYPE (Unit Move Scenario)



EQUIPMENT UPDATE

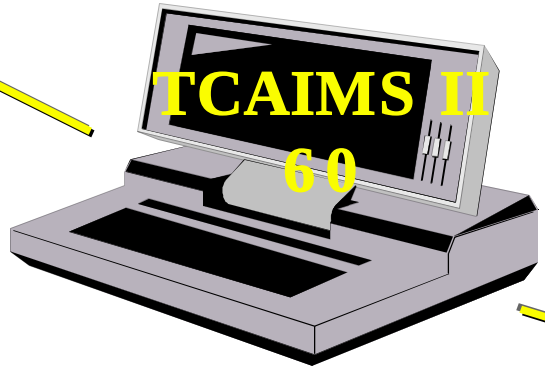
30 - HP LASERJET
(missent to Belgium SSA. Will be direct shipped to Tuzla)



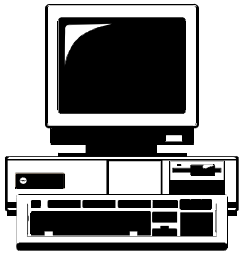


20 - INTERMEC PRINTER CABLES
(shipped from vendor EDD 6 May)

30 - INTERMEC PRINTER
2 ROLLS OF LABELS
2 RIBBONS
(shipped from Susquehanna & vendor)



(On hand; being distributed throughout Bosnia & Central Region)

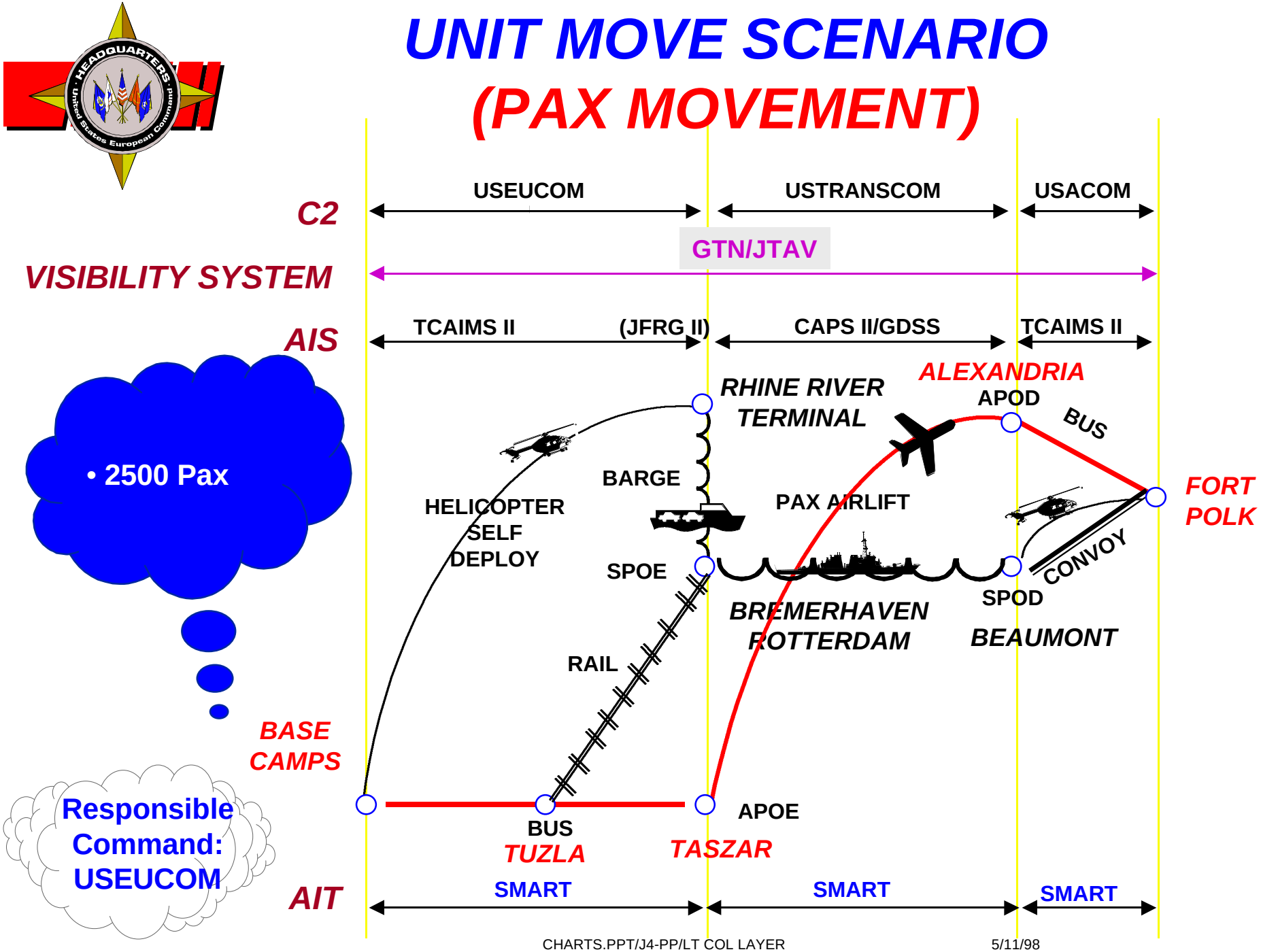


15 - RF TAG DOCKING STATIONS
(In Europe, Customs, ETD: F'feld 8 May)

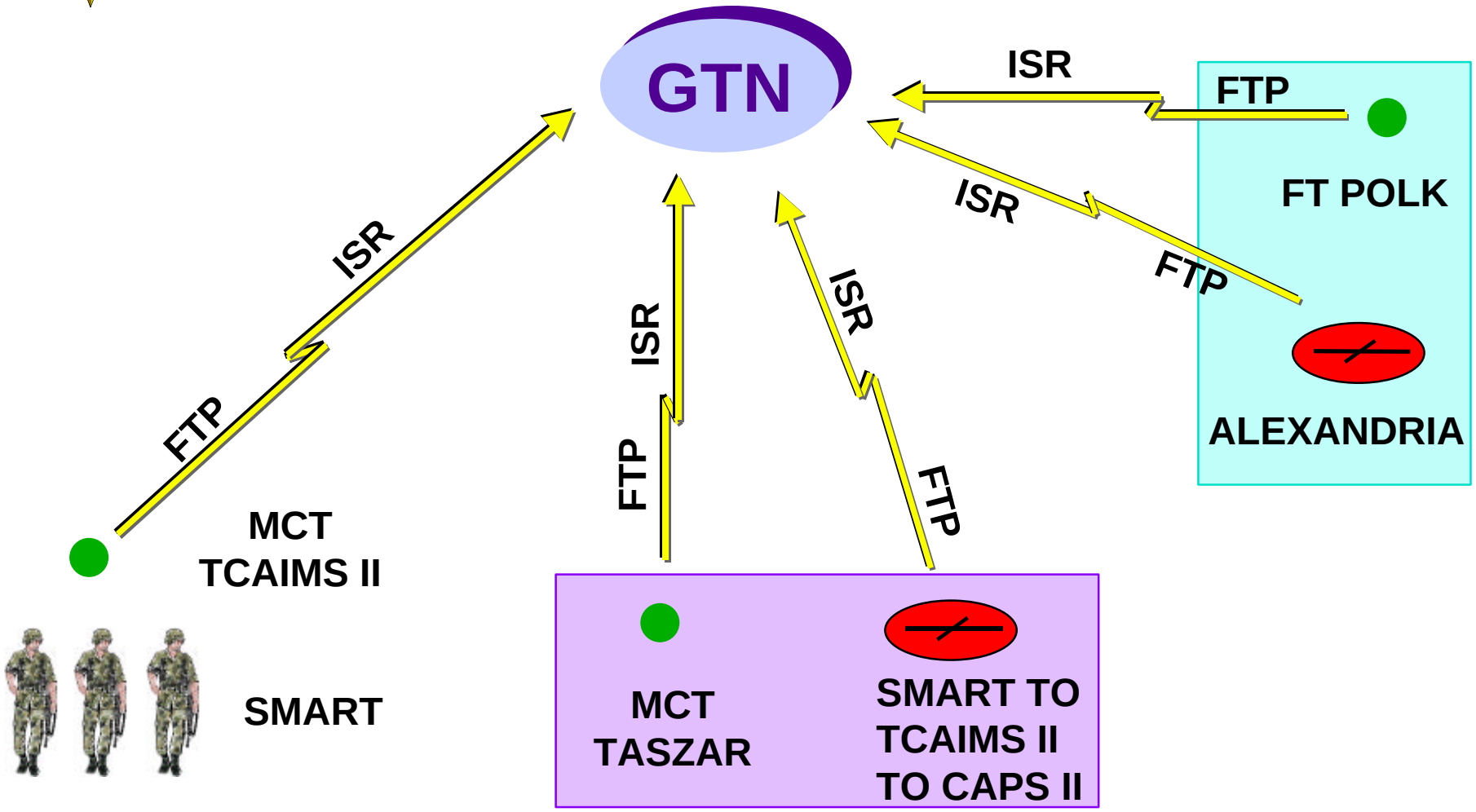
200 RF TAGS
(In Bosnia)

2D SCANNER
INTERMEC JANUS 20/20
"BRICK AND A STICK"
15 EACH
(shipped from Intermec)

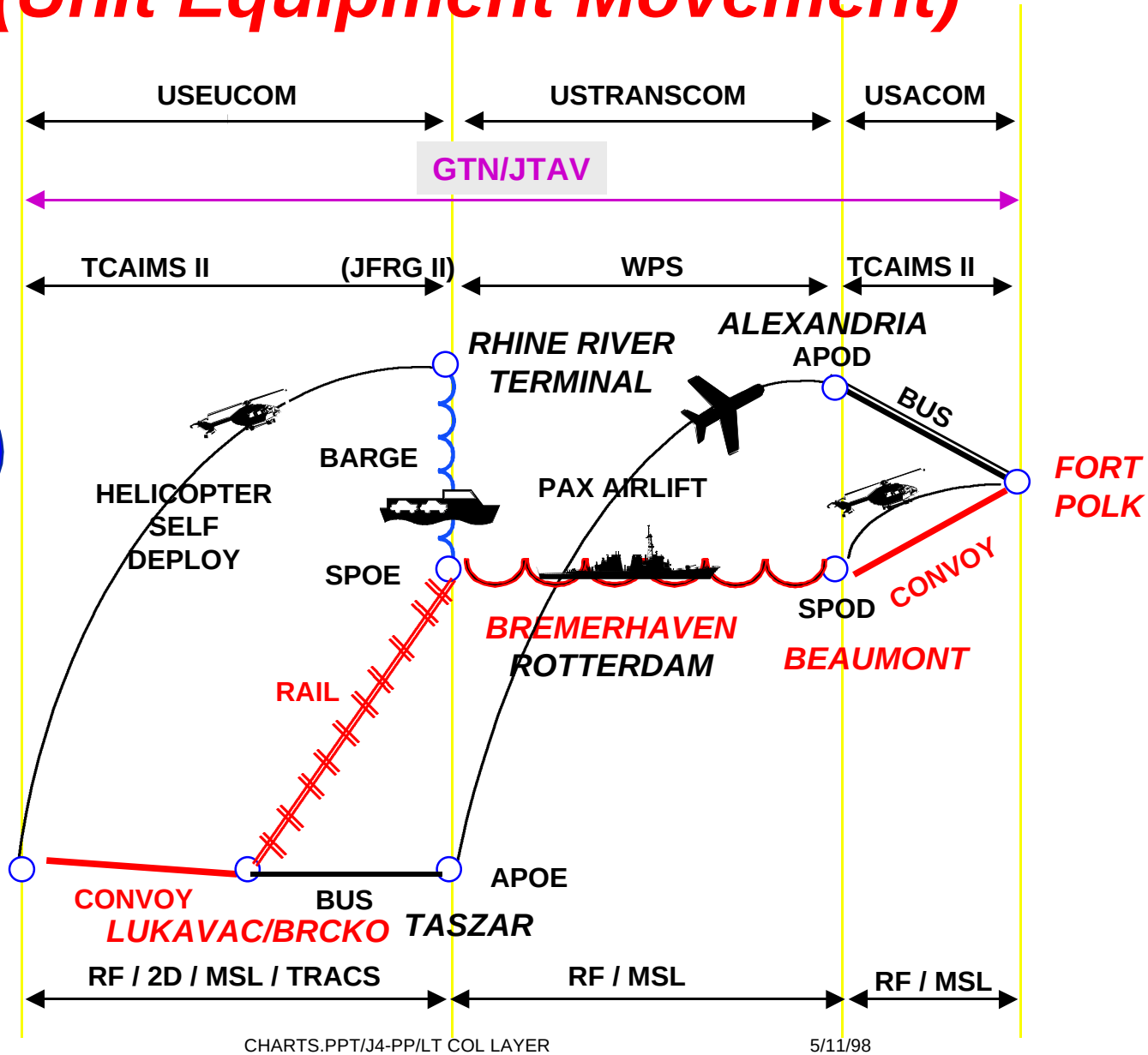
UNIT MOVE SCENARIO (PAX MOVEMENT)



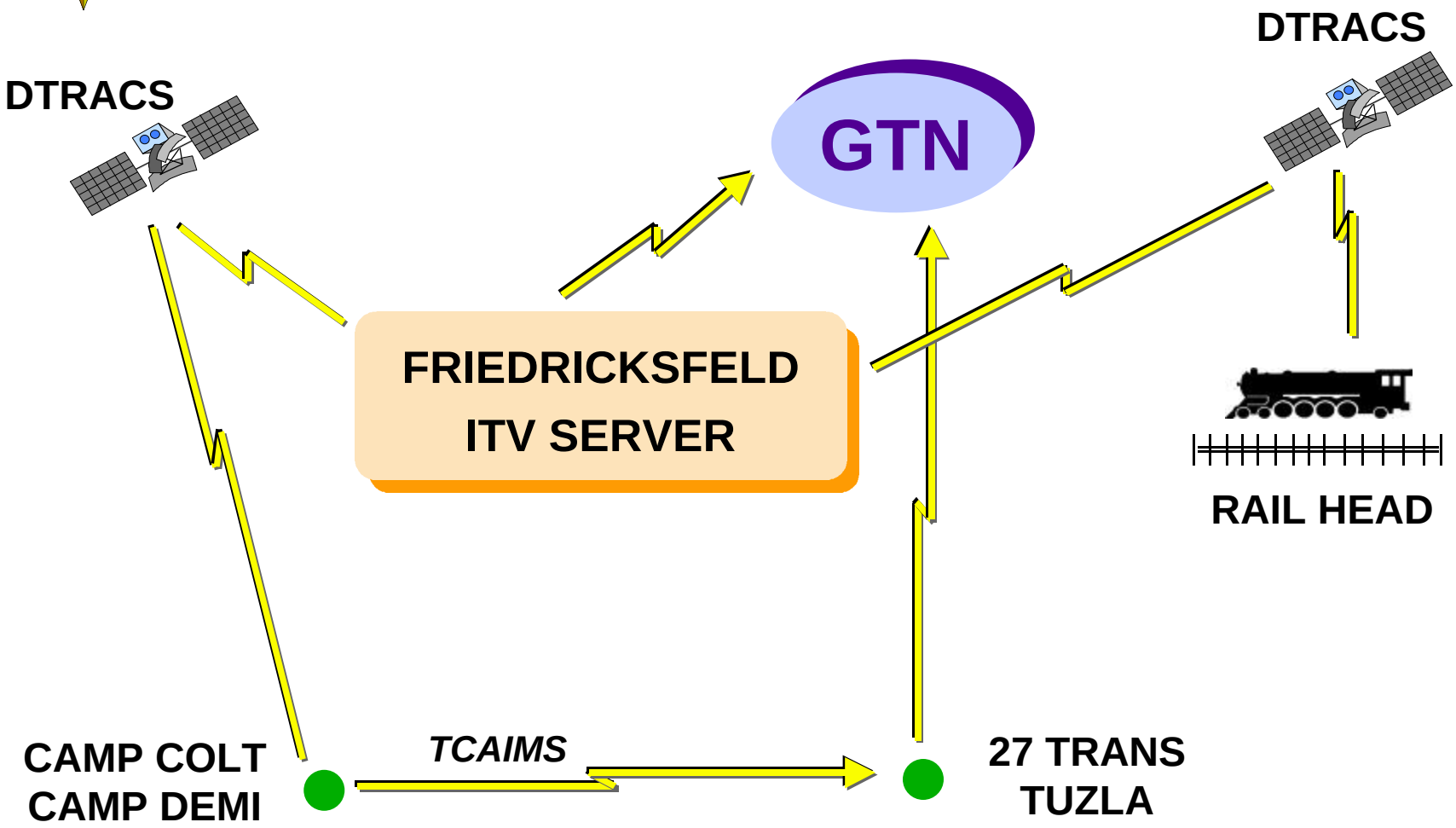
PAX MANIFESTING



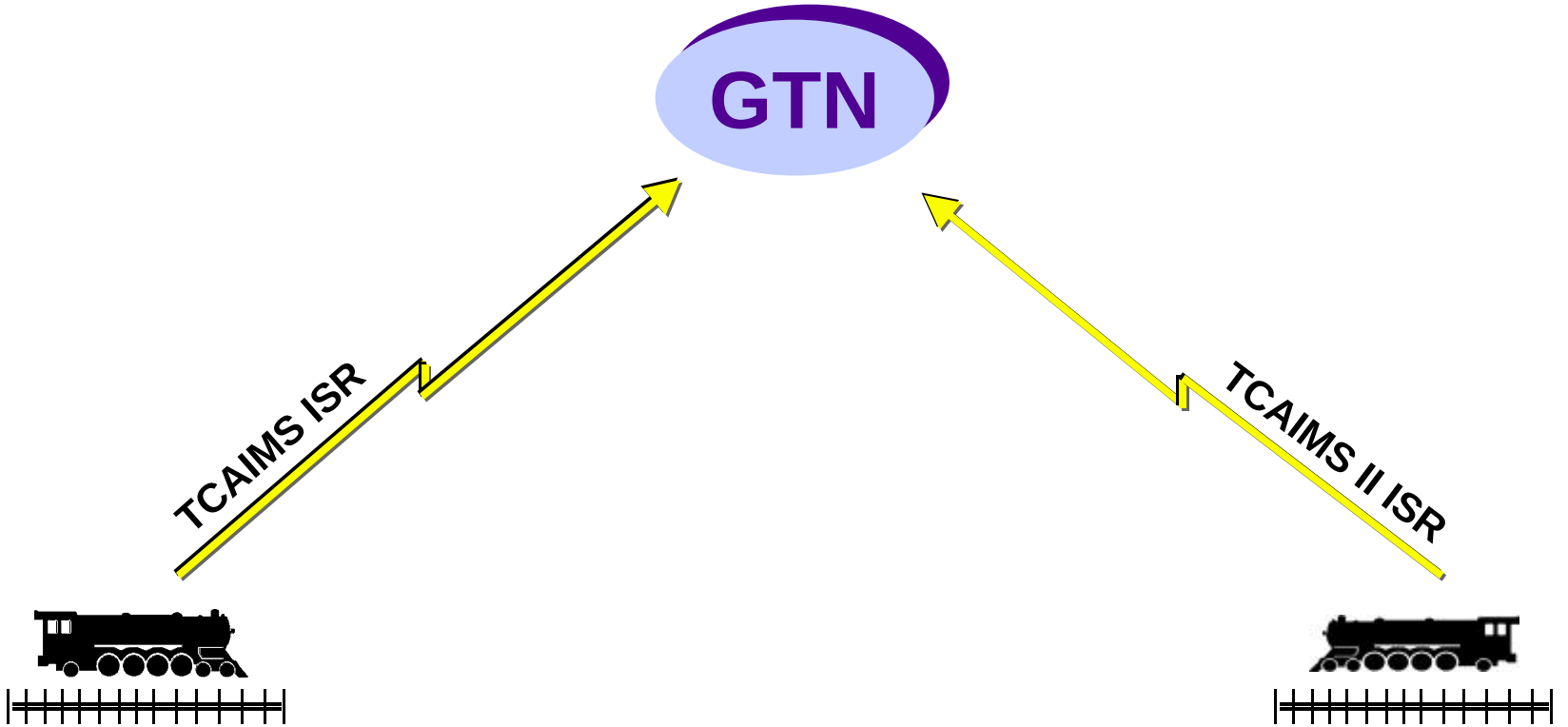
UNIT MOVE SCENARIO
(Unit Equipment Movement)



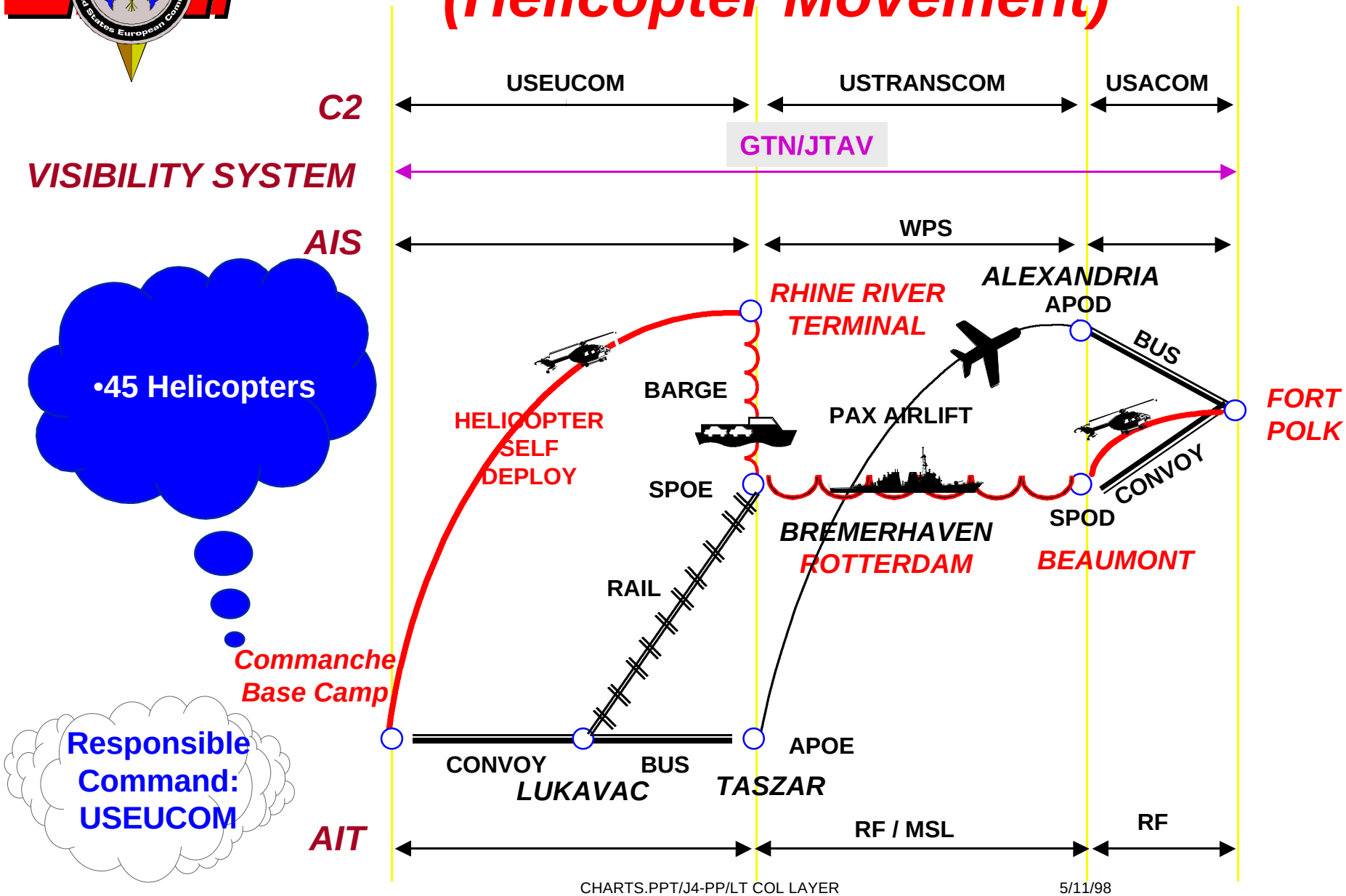
CONVOY


DTRACS
DTRACS
GTN
FRIEDRICKSFELD
ITV SERVER
RAIL HEAD
CAMP COLT
CAMP DEMI
TCAIMS
27 TRANS
TUZLA

RAIL


GTN
TCAIMS ISR
TCAIMS II ISR
LUCAVAC
MCT
(SCAN ON)
BREMERHAVEN
MCT
(SCAN OFF?)

UNIT MOVE SCENARIO
(Helicopter Movement)



AMMO SCENARIO/ FLY-AWAY KIT UPDATE

Lt Col Carl Punturerí

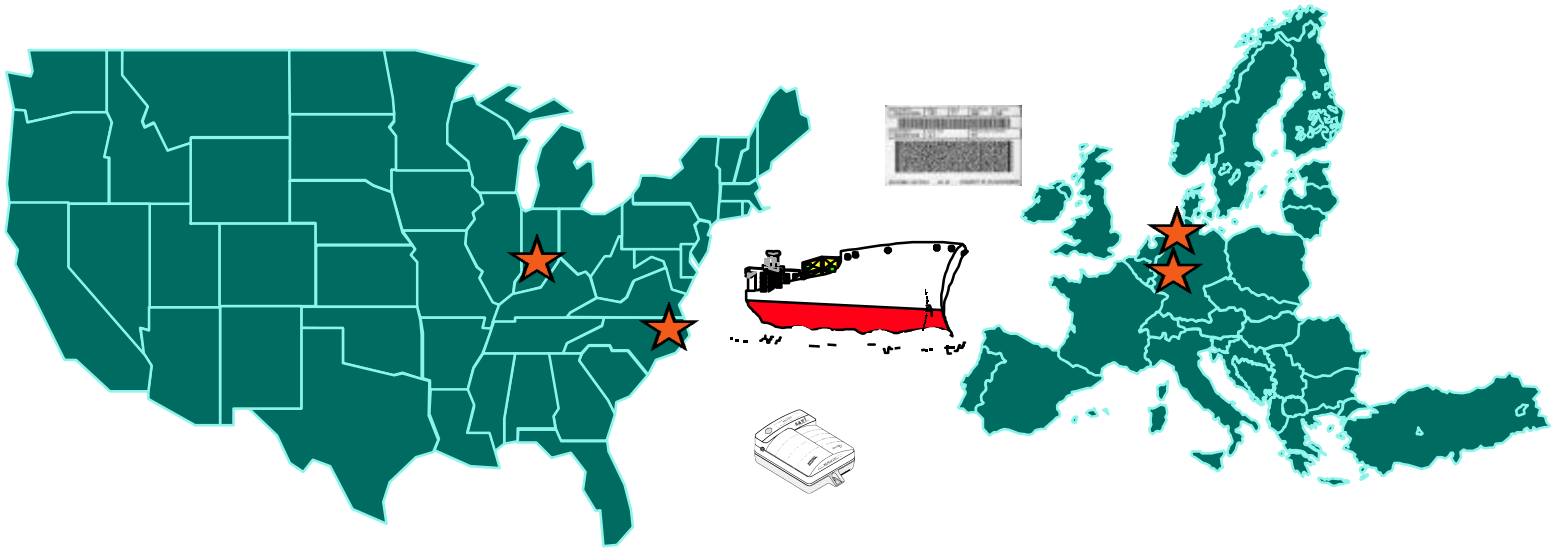
HQ USEUCOM/ECJ4-PPP

430-8054

AMMO SCENARIO

LEAD AGENCY: ARMY

CRANE DEPOT - SUNNY POINT - NORDENHAM - MIESAU/RAMSTEIN - ASPs



AMMO SCENARIO UPDATE

- RAMSTEIN IN, NAVEUR OUT
- NO PROJECTED SHIPMENT THIS FY
- TEST RUN IN AUGUST
- ACTUAL TEST ????

FLY-AWAY KIT UPDATE

- SLIGHT MODIFICATIONS TO KIT COMPOSITION
- CONCEPT TO BE TESTED DURING UNIT MOVE SCENARIO (LUKAVAC/BRCKO)
- EXPANDED TEST TO INCLUDE HURLBURT/ BRINDISI
- USAREUR EXECUTIVE AGENT FOR PROCUREMENT/MAINTENANCE DURING TEST PERIOD

DOD Logistics
Automatic Identification Technology
PROOF OF CONOPS

AIR CARGO SCENARIOS UPDATE

P. Kelly, USTRANSCOM J4, DSN 576-6710, 28 Apr 98

THE AIR PROTOTYPE TEAM

- USTRANSCOM lead agent
  - -- USEUCOM / USAFE
  - -- Air Mobility Command
  - -- NAVSUP

OBJECTIVES & GOALS

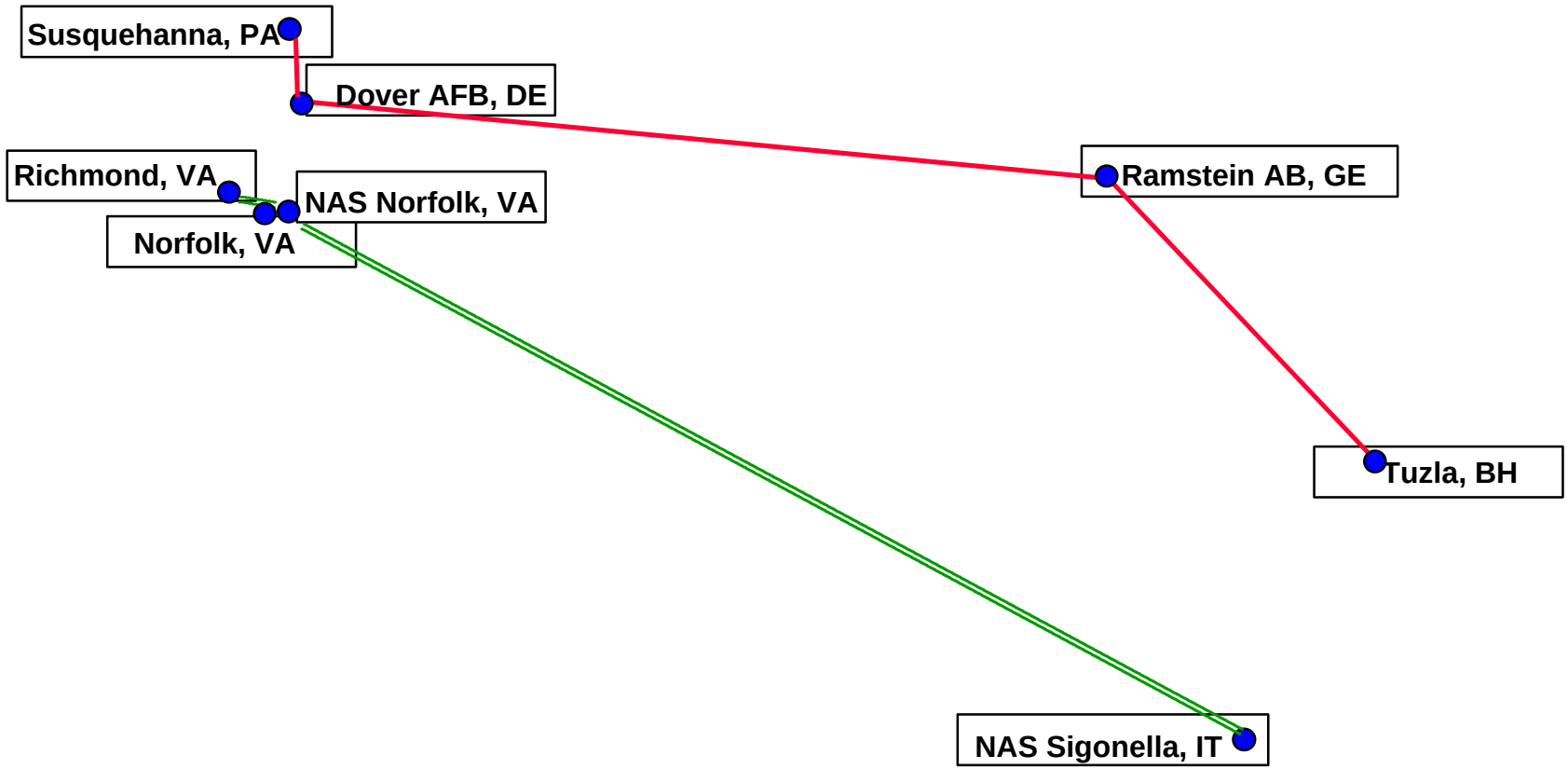
- **Integrate AIT with Automated Information Systems (AIS)**
  - **Processes and systems**
  - **From CONUS consolidation points to Service consignees in EUCOM**
- **Measure effect and cost of integrated AIT use on...**
  - **Node and mode processes (efficiency, accuracy)**
  - **Intransit and in-process visibility**
  - **AIS--legacy and migration**
- **Demonstrate advanced-technology microstamp**

REQUIREMENTS

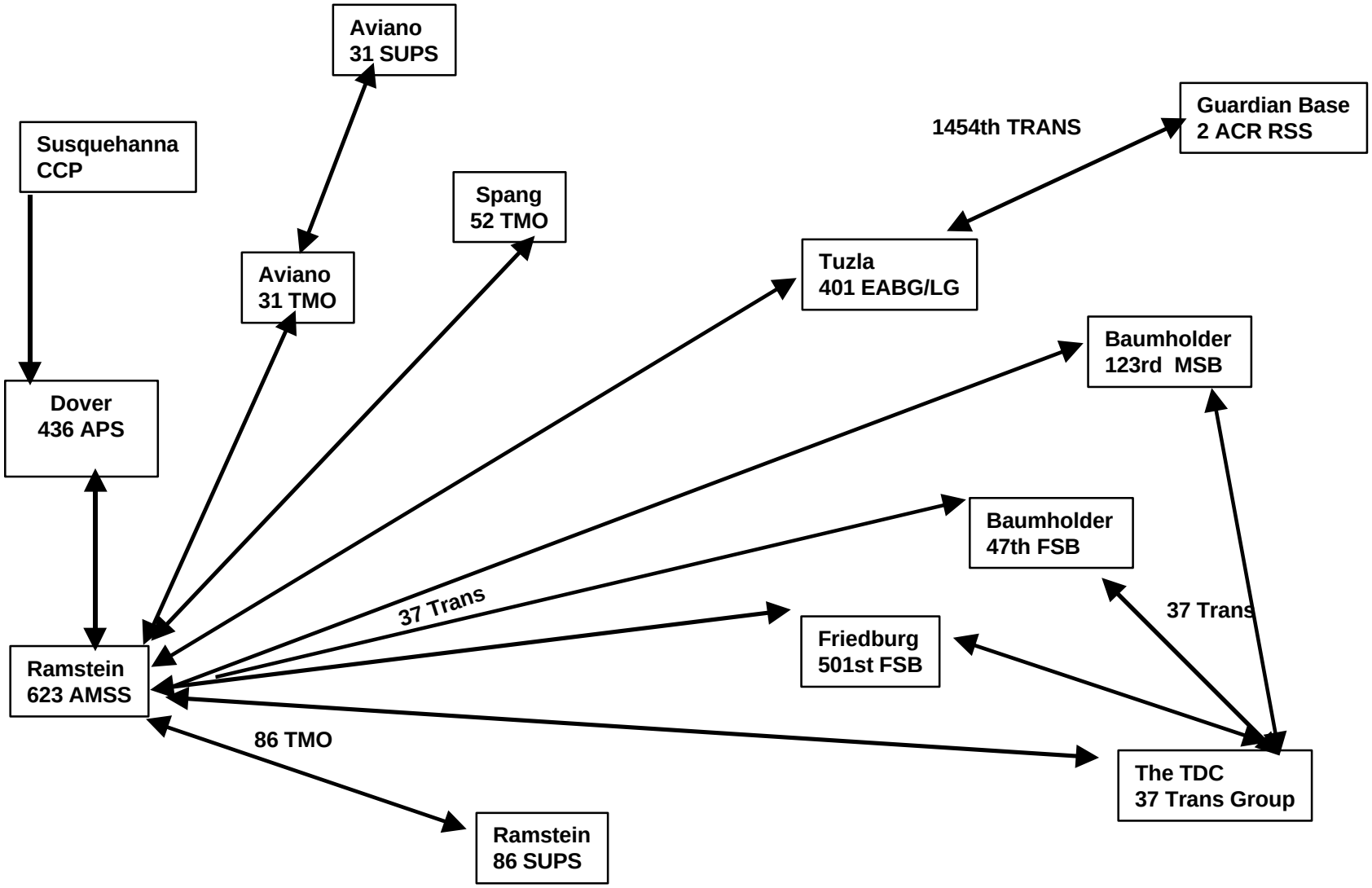
- AIT “front-end” applications work as planned and delivered in time.
- Personnel trained on use of new applications.
- World situation (summer ‘98) allows prototype.
- Radio frequency approvals in place.

Air Scenario

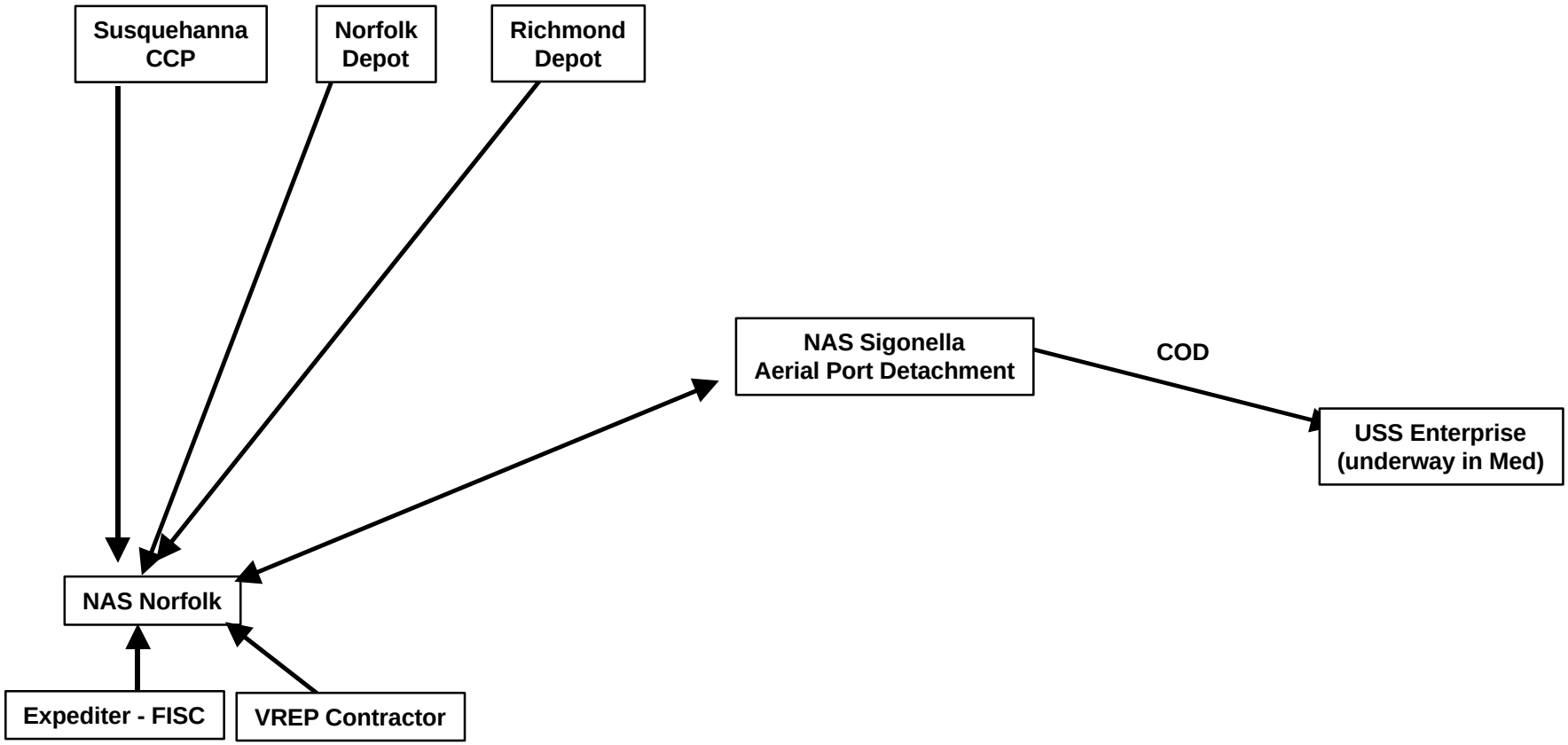
DLA Origins and Aerial Ports



CARGO MOVEMENT
NORTHERN CHANNEL SCENARIO



CARGO MOVEMENT
SOUTHERN CHANNEL SCENARIO



AIT-AIS RELATIONSHIPS TO BE MEASURED

1. **AIT input to ITV source data systems**
   - -- AIT updates/outputs for CAPS II Norfolk, Dover, Ramstein, Tuzla (DCAPS) & Sigonella
   - -- AIT updates to R-Supply (Navy on-board supply system)
   - -- AIT updates/outputs in SARSS-O and SATS (Army & AF supply systems)

2. **2D barcode generation in DSS at DDSP, DDNV, and DDRV**
   - -- Basis for air and ocean consolidation data at transp nodes
   - -- Basis for individual item supply data

PERFORMANCE MEASURES
- EFFECT OF AIT -

NODES

- Time
- Accuracy or Quality
- Personnel required
- Elimination of unnecessary work

ASSET VISIBILITY

- "Stand-off, in-the-box" visibility where no AIS
- "Stand-off, in-the-box" visibility in austere environments
- C2 effectiveness

COST-BENEFIT ANALYSIS

- 3-Year savings > AIT cost?
- Investment increases readiness and responsiveness?

DOCUMENTATION TASKS

- Time
- Accuracy
- Personnel required
- Elimination of unnecessary work?

AIS UPDATES

- Time
- Accuracy
- Elimination of unnecessary work?

CUSTOMER INQUIRIES

- Reduce personnel involved?
- Decrease time expended?

NEXT STEPS

- ☑ **Complete technical site visits**

- **Field SATS & RF-CMOS at AF Base Supply & TMO sites**
- **Complete business process server development (LOGICON)**
- **Complete “As-Is” (baseline) measures at all nodes**
- **Complete Navy on-board system development (USS Enterprise)**
- **Perform “To-Be” measures at all nodes during prototype**
- **Refine microstamp demonstrations plan**

NODE DETAILS

SUSQUEHANNA - DSS & AMS

NOW	PROTOTYPE	CHANGE
• Linear barcodes on shipment units	• Change DSS to accept & make 2D barcodes	• 2D barcode more reliable; holds more data
• RF Tags on certain Army ALOC pallets	• same	
• RF interrogators report to EUCOM server	• same	
• OMCs on multipacks	• same	

DOVER 436th APS

NOW

- RFID interrogators feed EUCOM server
- Scan TCN on items with lead TCNs
- Manually input TCMD for receipts with no advance
- Manual reconciliation of inchecked cargo
- Manually enter and print Linear Barcode for items without TCN BC and then scan

PROTOTYPE

- RF interrogators feed EUCOM server
- RFID loads ATCMD for RF-tagged truck cargo when “no-hit”
- Use 2D barcode to load TCMD data when no advance (“no-hit”)
- Apply RF ID tags to port-built pallets, with APOD RMS or TZL (about 10 missions needed for evaluation)

CHANGE

- Reduces “no-hits” manual input and transcription errors
- One-time input for CAPS II entry and barcode printing
- More reliable reads on 2D bar codes reduce port workload
- Slight workload increase to create RFID tags

RAMSTEIN: 623rd AMSS

NOW

- RFID interrogators feed EUCOM server
- GDSS passes RMS arrival to GTN
- CAPS to CAPS to advance air inbound message (disk back-up)
- Manual reconciliation of pallets
- Manually input TCMD for “no-hits”

PROTOTYPE

- RFID interrogators feed EUCOM server
- RFID loads ATCMD for RF-tagged pallets when “no-hit”
- Use BPS to load ATCMD data for 2D barcoded items, when “no-hit”
- Affix RFID tags to RMS port-built pallets/C-130 reconfigured pallets with APOD TZL
- CMOS & CAPS interface
- Manually enter and print Linear barcode for items without BC (doubles as CAPS II incheck)
- Affix 2D-barcoded MSL to unlabeled outbound cargo

CHANGE

- Reduces TCMD “no hits”
- Reduces “no-hits” resultant manual input and transcription errors
- One time input for CAPS II entry and barcode printing
- More reliable reads on 2D bar codes reduce port workload
- CMOS-CAPS interface eliminates manual/disk entry of AF Trans data between systems
- Increased workload for RFID closeout, creation, & attachment

RAMSTEIN: 86 TRANS & 86 SUPS
AVIANO: 31 TRANS & 31 SUPS

NOW	PROTOTYPE	CHANGE
• RFID interrogators feed EUCOM server • TMO types TCN into CMOS • CMOS feeds GTN • TMO delivers to supply	• RFID interrogators feed EUCOM server • RFID interrogators trigger CMOS transportation receipt for RF-tagged pallets • Use linear and 2D barcodes and OMC in supply receipt	• Reduces “no-hits” resultant manual input and transcription errors • Reduced personnel reqts
• Manual reconciliation of pallets and items	• Use BPS to load TCMD data for 2D barcoded items, when no advance file • Automatic reconciliation and reports of discrepancy • CAPS interfaces with CMOS	• Reduces TCMD “no hits”
	• SATS scans 2D barcode to in check • SATS uses smart card to issue supplies	• More accountable issue process

SPANGDAHLEM: TMO

NOW	PROTOTYPE	CHANGE
• Manual reconciliation of pallets and cargo	• RFID interrogators feed EUCOM server and load TCMD for RF-tagged cargo • RFID interrogators trigger transportation receipt in CMOS. • Automatic reports of discrepancy	• Reduces TCMD “no hits” • Reduces “no-hits” resultant manual input and transcription errors • Reduced personnel reqts

TUZLA: 401st EABG

NOW

- GDSS passes aircraft arrival to GTN
- CAPS to CAPS to advance air inbound message (disk back-up)

- Manual reconciliation of pallets and cargo
- Manually input TCNs for non-barcoded items

PROTOTYPE

- RFID interrogators feed EUCOM server
- RFID loads ATCMD for RF-tagged pallets when “no-hit”
- Use BPS to load TCMD data for 2D barcoded items, when “no-hits”

- Scan TCN on items with lead TCNs
- Manually enter and print Linear barcode for items without BC (doubles as CAPS II incheck)
- Automatic reports of discrepancy (individual-item in-check compares to pallet total on RF tag)

CHANGE

- Reduces TCMD “no hits”
- Reduces “no-hits” resultant manual input and transcription errors

37 TRANS GRP (TDC)

NOW

- EUCOM ITV RF interrogators feed Friedrichsfeld server
- Load OMC into STARS to populate
- Manually enter lead TCN into STARS
- Read linear BC (when possible)
- Build multipacks
  - Create OMCs
  - Burn RF tags for vehicles going to units with interrogators

PROTOTYPE

- EUCOM ITV RF interrogators feed Friedrichsfeld server
- Use CMOS as TDC distribution system for selected DODAACs
- Continue STARS use to compare to CMOS
- RF-tagged retrograde cargo loads TCMD to CMOS
- Use 2D bar code to load ATCMD data when no advance data
- CMOS provides ATMCD for RMS-originated shipments
- Burn 2D, OMCs, and RF tags for participating DoDAACs

CHANGE

- Reduces TCMD “no hits”
- Reduces “no-hits” resultant manual input and transcription errors
- Outbound RFID increases visibility
- RF-CMOS eliminates manual entry of AF trans data between systems
- Increased workload for 100% 2D, RF tags and OMC for test DoDAACs
- Probable increased workload to run two AIS

SSAs: 123 MSB / 47 FSB / 501 FSB / 2ACR (RSS)

NOW

- EUCOM ITV RF interrogators feed Friedrichsfeld server
- Load OMC into SARSS-O to populate then manually reconcile
- Weekly update of RODS or no RODS
- Read linear BC (when possible)
- Build multipacks
  - Burn OMCs for items that already have good BC
  - Burn RF tags for vehicles going to units with interrogators

PROTOTYPE

- EUCOM ITV RF interrogators feed Friedrichsfeld server
- Use 2D- and linear barcoded MSLs & OMCs to update SARSS
- Affix 2D- barcoded MSLs to outbound cargo
- Affix RF tags to pallets built for RMS/TZL
- RFID tag triggers TK6
- BPS assists in Reports of Discrepancy

CHANGE

- One time input for SARSS-0 and barcode printing
- RFID tag triggers TK6. Actual arrival time reflected by TK6 sent to LIF

DD RICHMOND AND DD NORFOLK - DSS

NOW

- Apply linear barcode to outbound inventory

PROTOTYPE

- OMCs on multipacks
- Change DSS to create and accept 2D barcode
- Apply 2D-barcoded MSL to inventory shipment units outbound to Norfolk

CHANGE

- Increased workload for OMCs

NORFOLK NAVY BASE AMC TERMINAL

NOW

- Manual reconciliation of inchecked cargo
- Scan TCN on items with lead TCNs
- Manually input TCNs for non-barcoded items.
- Manually enter and print Linear Barcode for items without BC
- Manually enter TCMD when no advance on inchecked cargo

PROTOTYPE

- Automatic reconciliation of inchecked cargo
- Use 2D bar code to load TCMD data when no advance (“no-hit”)
- Manually enter and print Linear barcode for items without BC (doubles as CAPS II incheck)
- Use BPS to create pallet contents listing on OMC for SIZ pallets

CHANGE

- Reduces “no-hits” resultant manual input and transcription errors
- One time input for CAPS II and barcode printing
- More reliable reads on 2D bar codes reduce port workload

SIGONELLA NAVY BASE AMC TERMINAL

NOW	PROTOTYPE	CHANGE
• Manually reconcile pallets • Manually compile pallet-build data for CAPS II • Manually input TCNs for non-barcoded items.	• Use 2D bar code to load TCMD data when no advance (“no-hit”) • Manually enter and print Linear barcode for items without BC (doubles as CAPS II incheck) • Use OMC as pallet contents listing to reconcile overs & shorts	• More accurate receipting • Increased work load applying barcodes to non-barcoded items destined for IKE • More reliable reads on 2D bar codes reduce port workload

USS ENTERPRISE

NOW

- Linear BC scan items in inventory update process (manual entry of some data)

PROTOTYPE

- Use 2D barcodes & OMCs in supply receipt process
- Use 2D barcodes in inventory update process (all automatic)
- Automatic reconciliation of “due-in” requisitions

CHANGE

- Increased accuracy and speed
- Automatic reconciliation

Baseline Data Collection Schedule
May

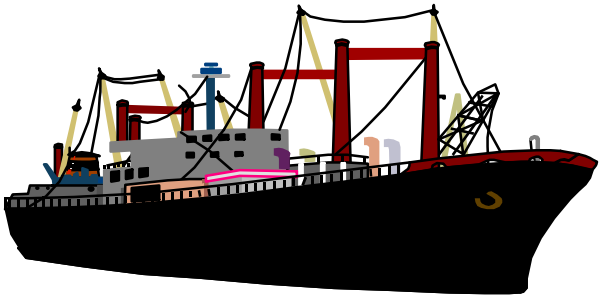
Mon	Tue	Wed	Thu	Fri	Sat	Sun
11 TDC TDC	12 TDC TDC	13	14 Benelux ---------	15 Antwerp ---------	16	17
18 SPANG 123 MSB	19 SPANG 501 FSB	20 C2-KIC 47 FSB	21	22	23	24
25	26 Sigonella Aviano	27 Augusta Aviano	28	29 Naples	30	31

Top Row Data (As of 4 Apr) from Mr Wells: robert_wells@sra.com / (618) 624-6660.

Second Row Data (As of 4 May) from Mr Moores: terry_moores@sra.com / (703) 227-7073.

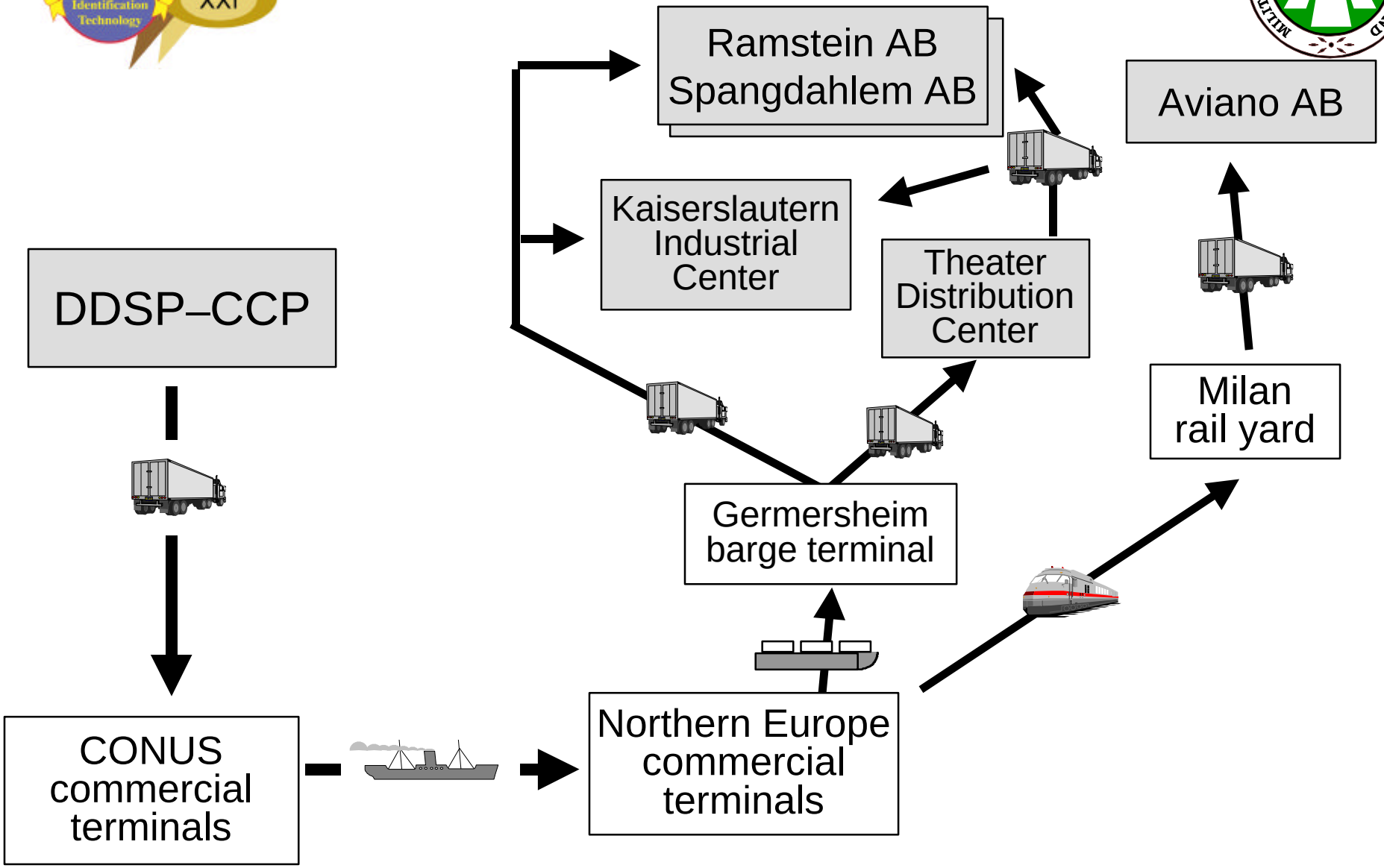
Logistics AIT
Operational Prototype

Seavan Scenarios

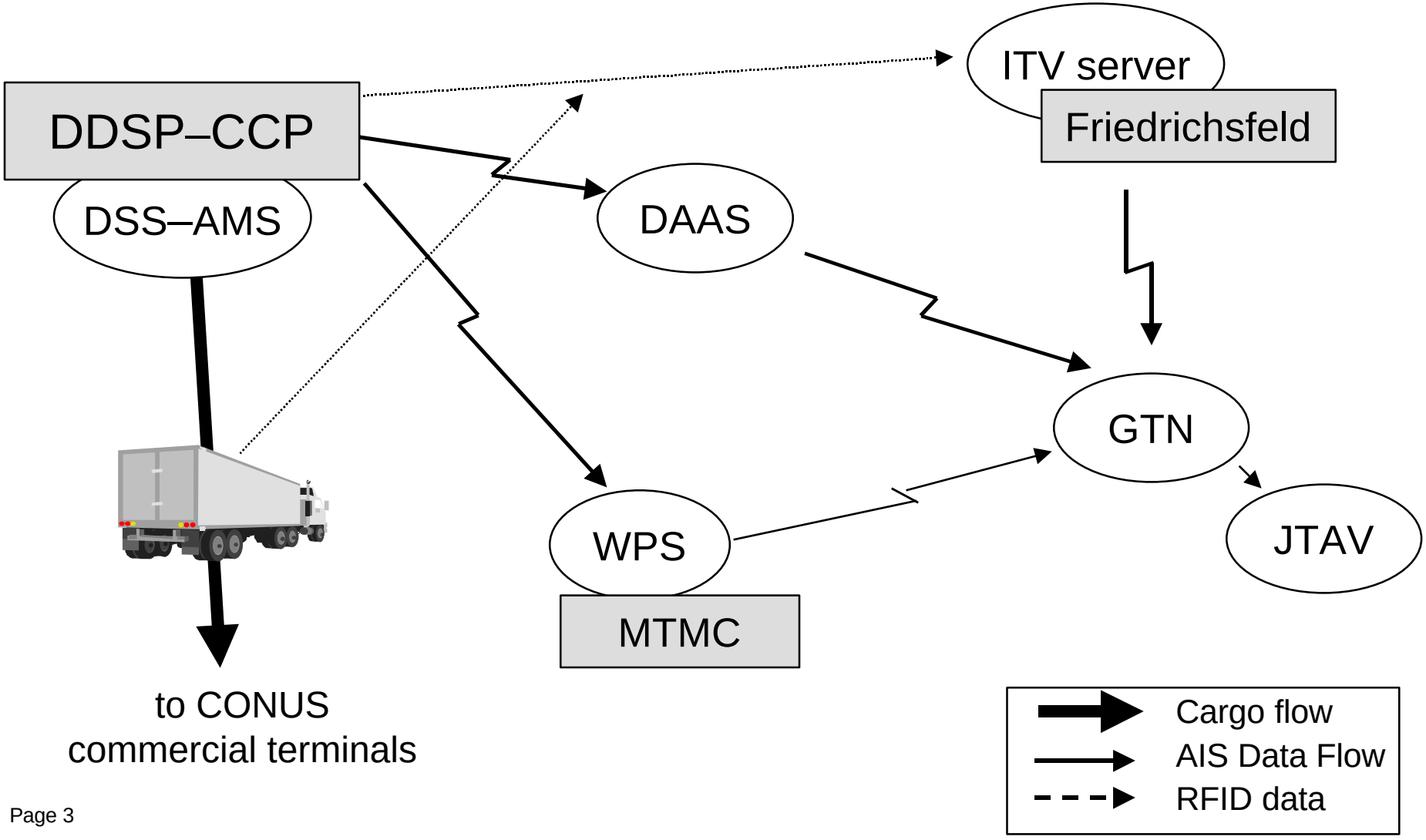


15 May, 1998

Northern Route - Overview



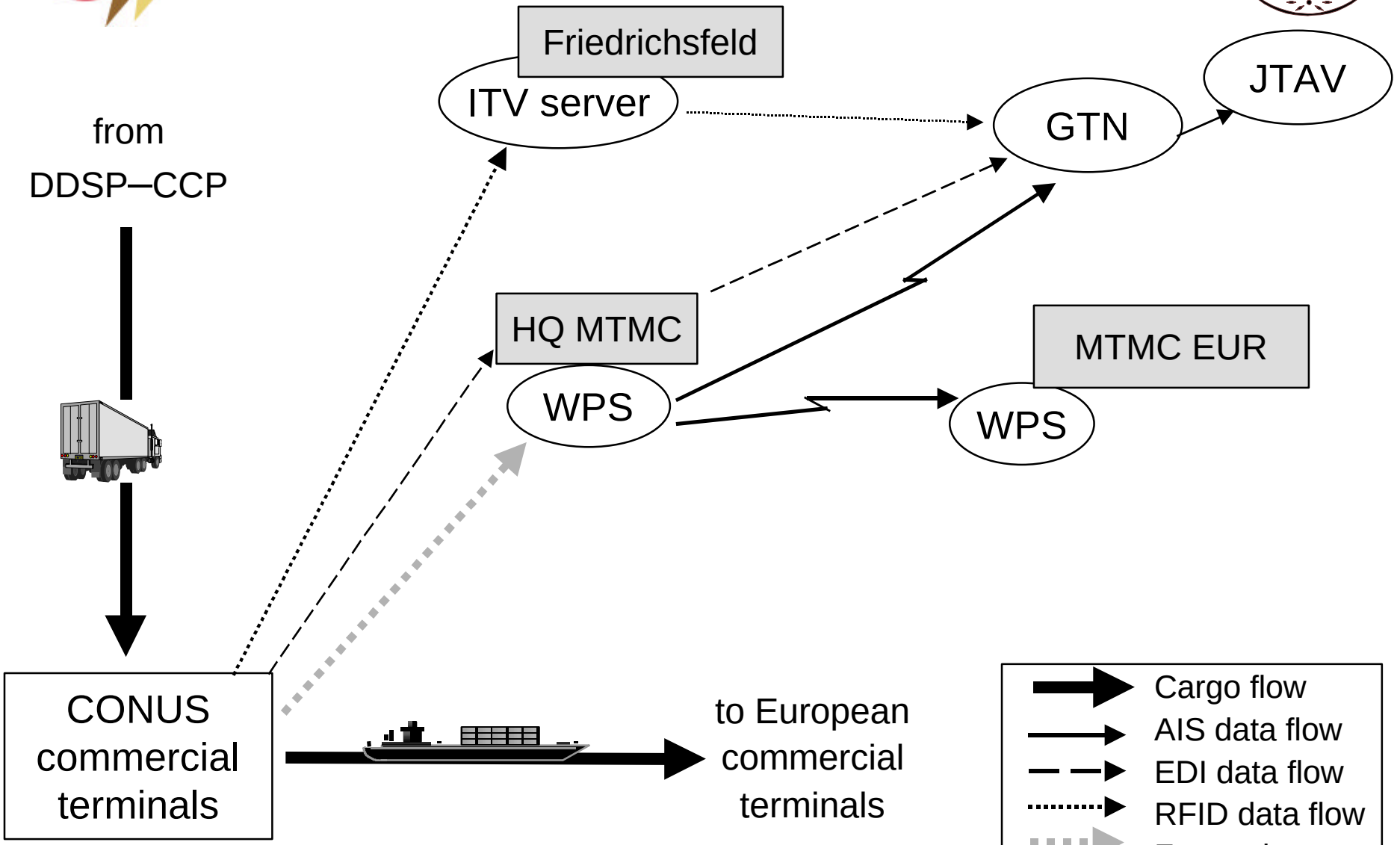
Northern Route - Origin



Northern Route - Origin

- Read linear/2D to consolidate seavans
- Burn global 2D, OMC, and RF tags
- AIT vs AIS-AIS broadcast upon departure

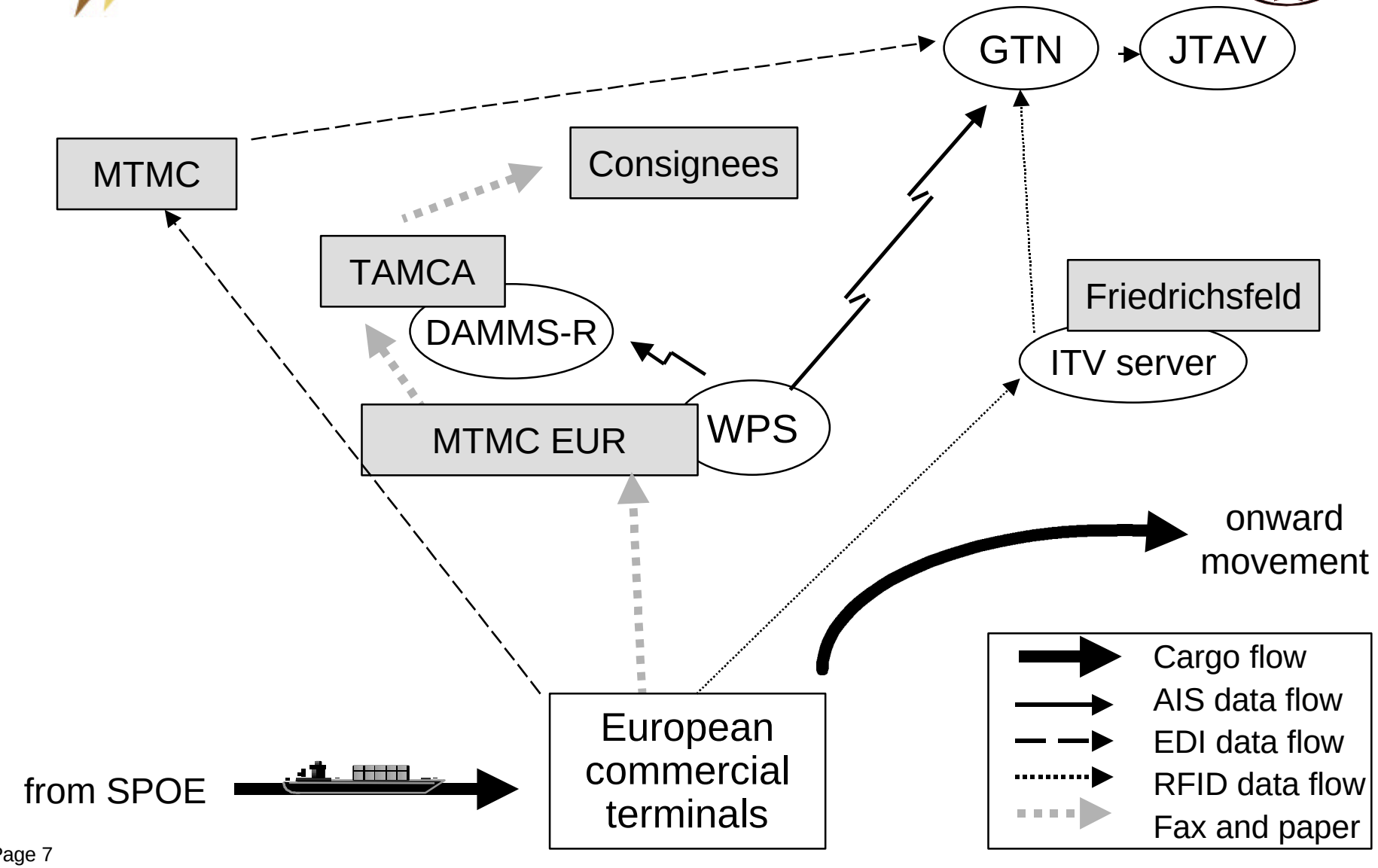
Northern Route - SPOE



Northern Route - SPOE

- Read RF to acknowledge arrival
- Read RF to acknowledge lift
- RF vs EDI broadcast upon departure

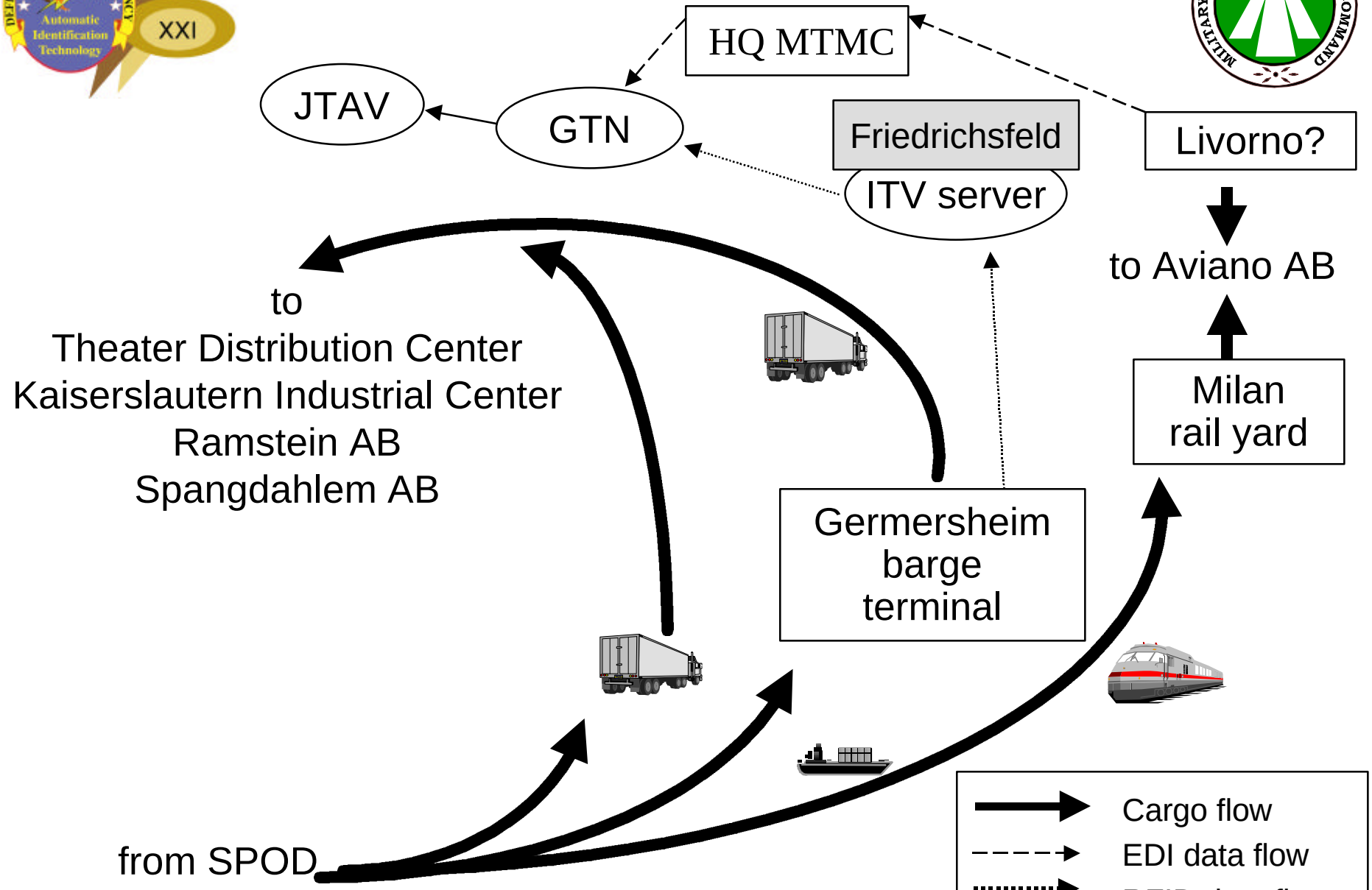
Northern Route - SPOD



Northern Route - SPOD

- Read RF to acknowledge discharge (Antwerp only)
- Read RF to acknowledge disposition
- RF vs EDI broadcast upon departure

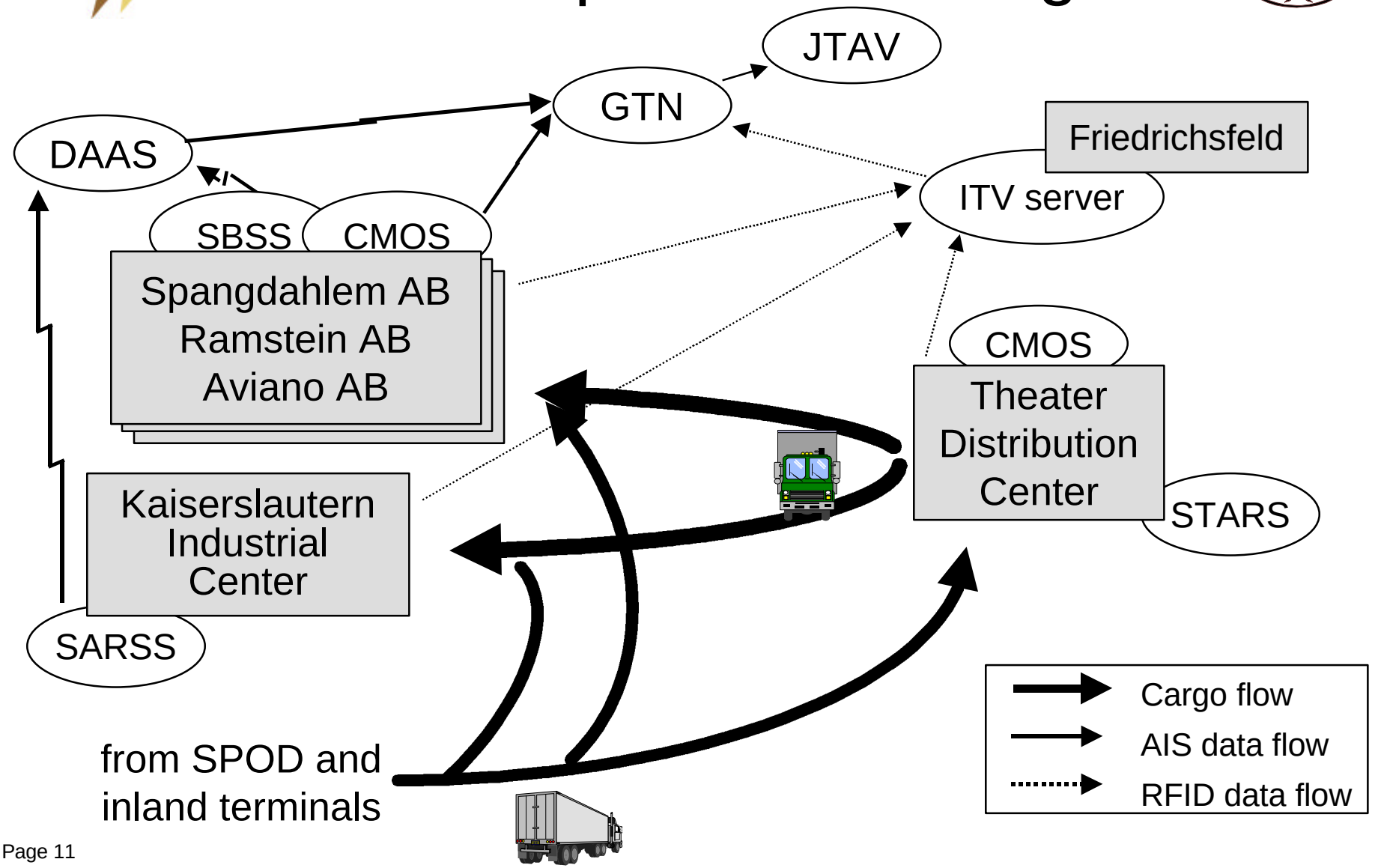
Northern Route - Inland



Northern Route - Inland

- Read RF to acknowledge disposition (at Germersheim only)
- No evaluations at Milan rail yards
- No evaluations for land movements from SPOD
- RF vs EDI broadcast upon departure (at Germersheim only)

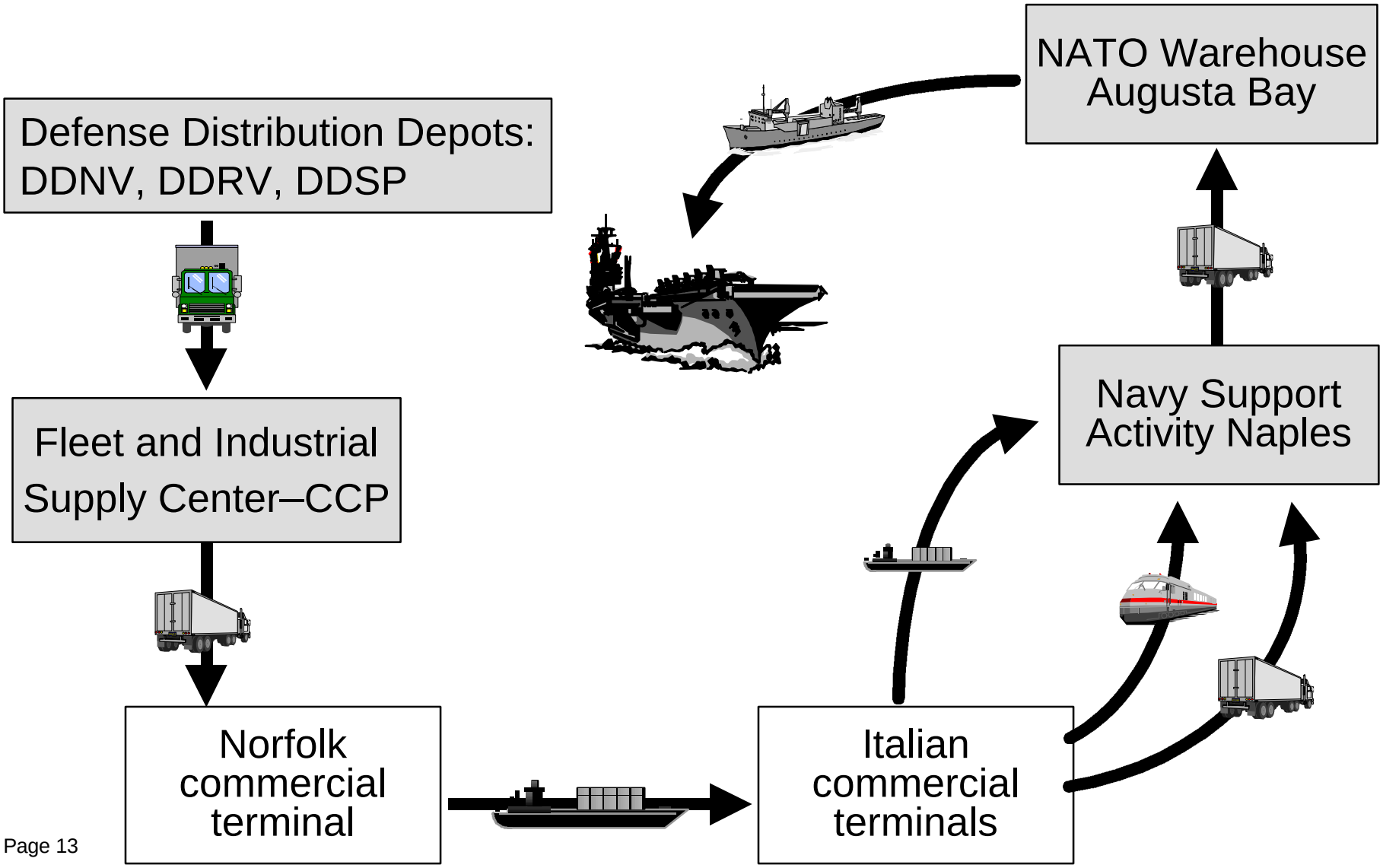
Northern Route - Receipt & Processing



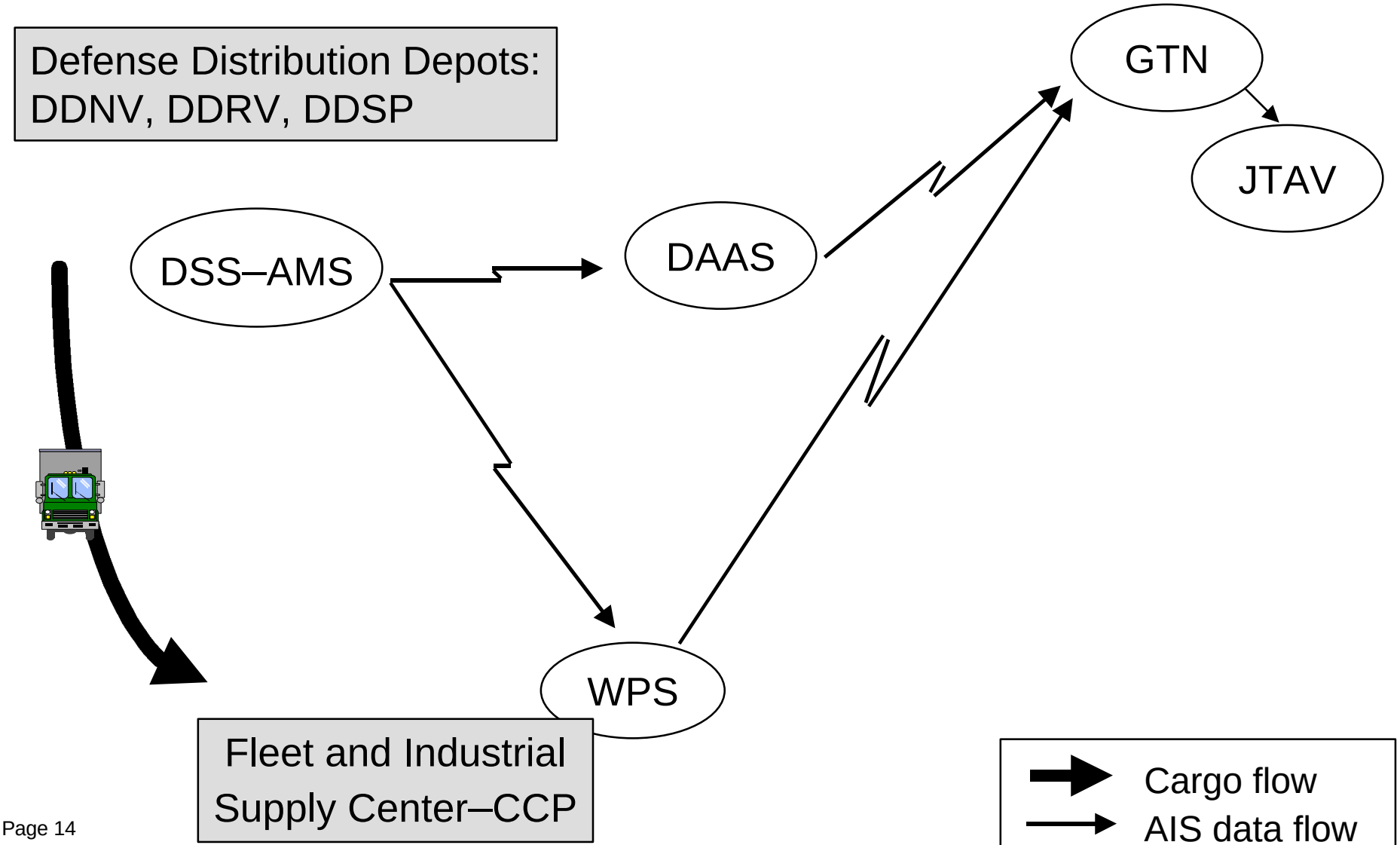
Northern Route - Receipt & Processing

- Read RF to acknowledge arrival
- Read global 2D/OMC/RF to perform transportation in-check
- Read item/multi-pack linear/2D/OMC to receipt
- Read SMART to issue (at Ramstein and Aviano only)

Southern Route - Overview



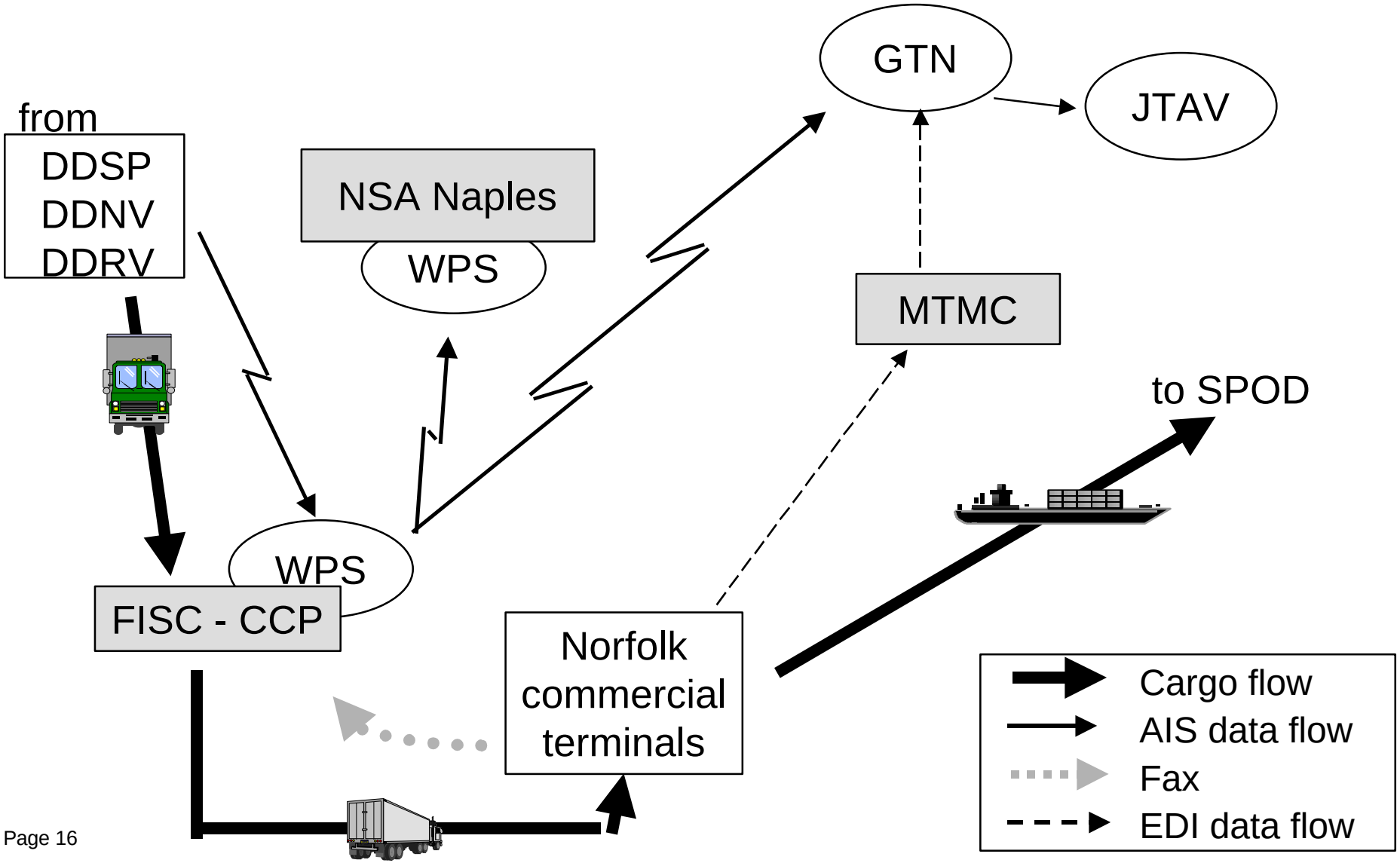
Southern Route - Origin



Southern Route - Origin

- Burn 2D for individual items (depots only)
- Burn 2D/OMC to consolidate multi-packs (depots only)
- Read linear/2D to consolidate seavans (FISC only)
- Burn global 2D/OMC for seavans (FISC only)

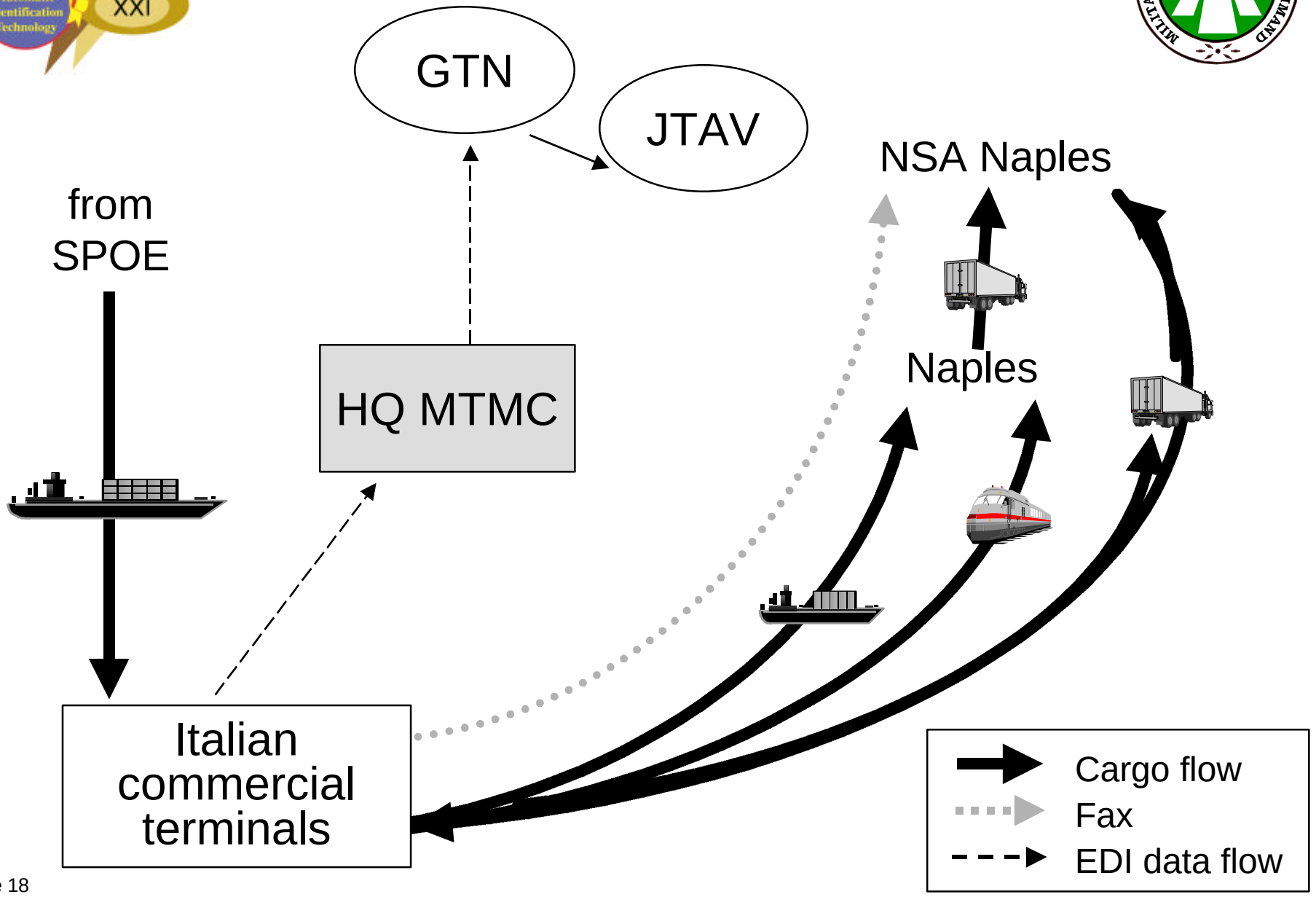
Southern Route - SPOE



Southern Route - SPOE

- EDI broadcast upon departure

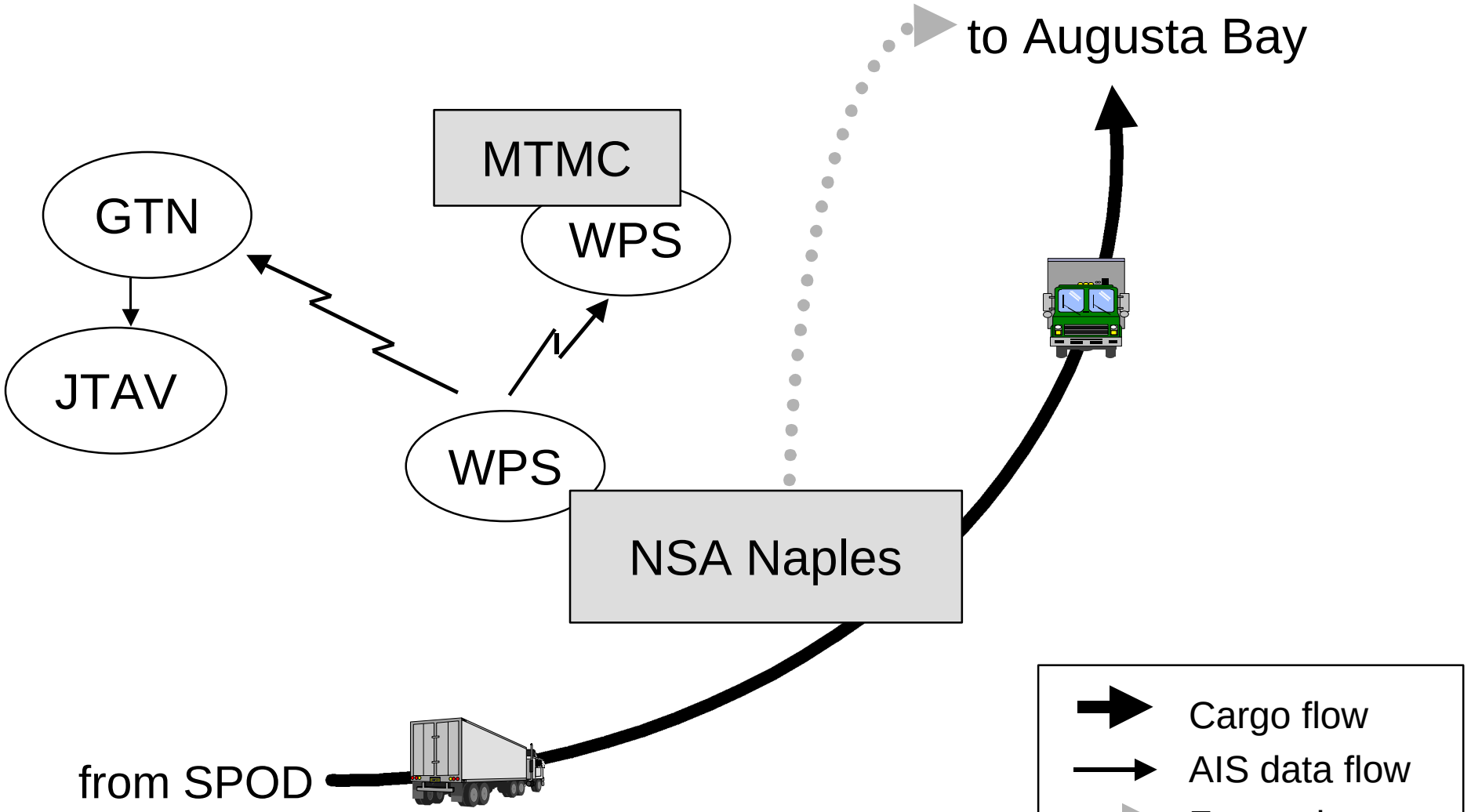
Southern Route - SPOD



Southern Route - SPOD

- EDI broadcast upon discharge

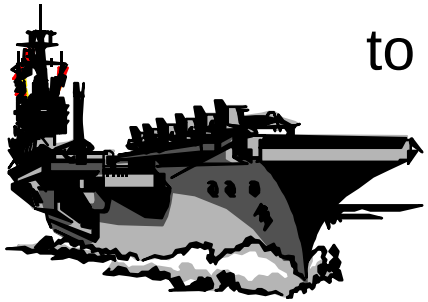
Southern Route - NSA Naples



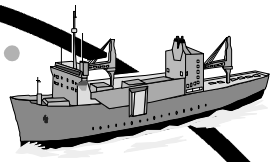
Southern Route - NSA Naples

- Read global 2D/OMC to unstuff seavans and perform transportation in-check
- Read 2D/OMC to consolidate truck loads
- Read 2D/OMC to manifest truck loads

Southern Route - Augusta Bay



to



CLF

Tactical AMS

Augusta Bay

from NSA Naples

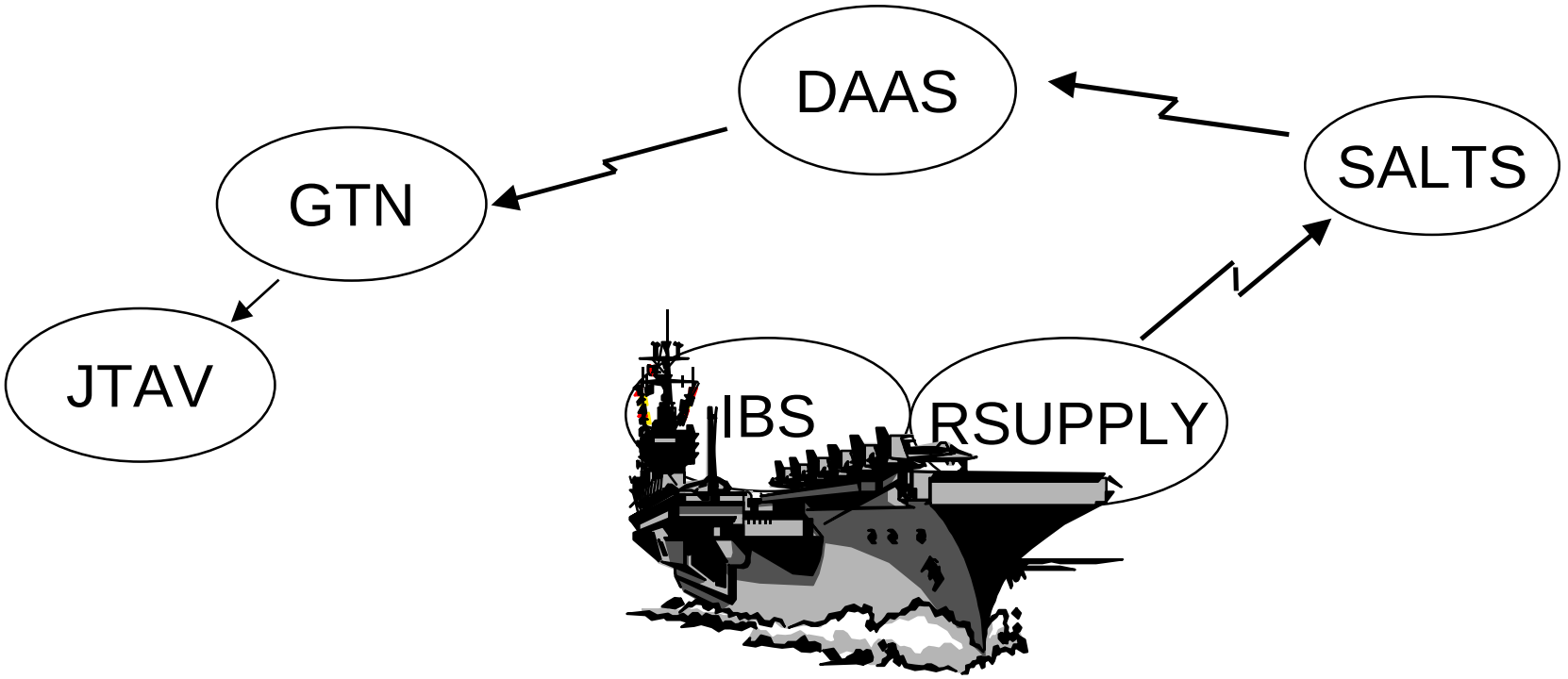
Cargo flow

1800 message

Southern Route - Augusta Bay

- Read global 2D/OMC to perform transportation in-check
- Read global 2D/OMC to generate 1800 reports
- Read item/multi-pack 2D/OMC to disposition

Southern Route - CVN Receipt Processing



Southern Route - CVN Receipt Processing

- Read global 2D/OMC to perform transportation in-check
- Read item/multi-pack linear/2D/OMC to receipt
- Read item linear/2D to determine storage location and stow

UNCLASSIFIED

BPS Fielding Schedule
Jun

Mon	Tue	Wed	Thu	Fri	Sat	Sun
1	2	3	4	5	6	7 Dover
8 Norfolk Dover Brmhvn RMS	9 NAS & Brmhvn RMS	10 Norfolk Beumont Brmhvn RMS	11 FISC Beumont ***C2-KIC*** RMS	12 Norfolk Beumont C2-KIC RMS	13 RMS	14 RMS
15 SigNaplesAviano 123 MSB RMS	16 SigNaplesAviano 47 FSB RMS	17 SigNaplesAviano 501 FSB RMS	18 SigNaplesAviano SPANG RMS	19 SigNaplesAviano SPANG RMS	20 SigNaplesAviano	21 SigNaplesAviano
22 SigNaplesAviano BOSNIA	23 SigNaplesAviano BOSNIA	24 SigNaplesAviano BOSNIA	25 SigNaplesAviano BOSNIA	26 SigNaplesAviano BOSNIA	27	28

As of 5 May (Peter Langworthy: plangworthy@logicon.com / (757) 253-5700)

BLUE = TEAM 1 **GREEN = TEAM 2** **PINK = TEAM 3** **ORANGE = TEAM 4** **PROBLEMS**